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# SCHOLASTIC COACH

Reg. U. S. Pat. Off.

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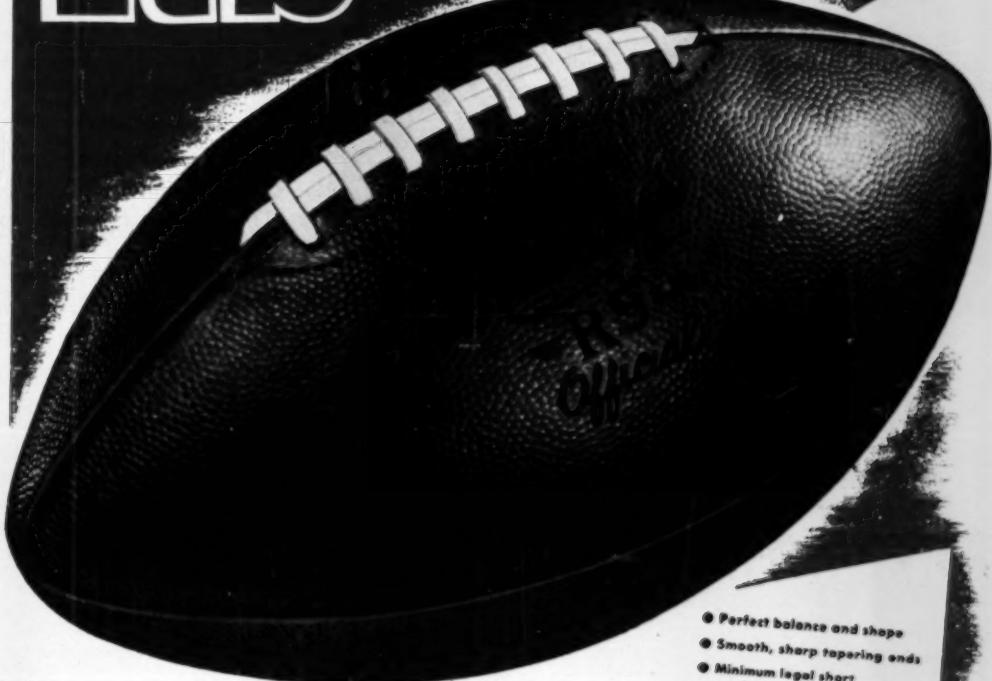
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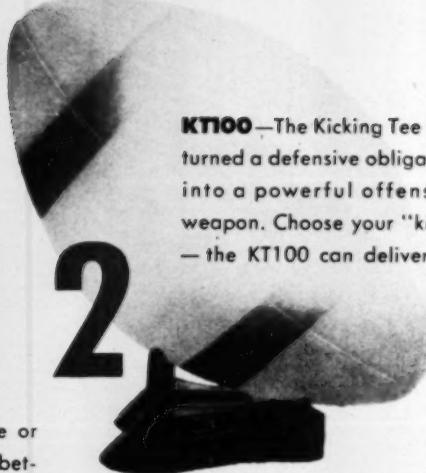
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# Huddling in the open

**S**HORTLY after we hung out our adjectives to dry last May, a watch-charm courier from the post office hit us with a large brown envelope postmarked Montreal, Canada.

Upon knifing through the flap, we uncovered a tidily typed manuscript from one Vic Obeck, athletic director and football coach at McGill U. It was a happy discovery, for the manuscript turned out to be a clear, concise exposition of a new and unique method of huddling.

That's the story behind *The Open Huddle*, the article you'll find on page 14. After currying it a bit, we sent it down to the printers, content in the knowledge that our 1949 season was getting off to a bang-up start.

Three days later our contentment turned to pure bliss. Upon opening our newspaper, we discovered a story to the effect that Frank Leahy was installing the open huddle at Notre Dame this season. This is what the noblest Notre Damer of them all had to say about it:

"The important feature is that the quarterback calls the signals with his back completely turned to the enemy line. His 10 teammates, in parallel lines of five, with the men in the first line leaning forward slightly, stand facing him. They listen and they watch his lips.

"In the past it was sometimes necessary to call the signal two or three times, so loud was the crowd noise. That consumed time and slowed up the attack. Now the signal registers immediately and, of course there is no danger of the opponents reading our man's lips, for his back is always turned to them.

"Thus assured against detection, we stand closer to the line of scrimmage, seven yards as against, say, 10. This means we go into action quicker. The primary objective of the new huddle is to accelerate the attack. I think it will give us time for five or six additional plays.

"The idea isn't original. A young high school coach in Canada mailed it to me. We get hundreds of suggestions on how to play football in the mail. Not all of them are workable

but this one I like. It seems to make sense."

We think we can safely assume that Frank's "young high school coach in Canada" got the idea from our man Obeck.

IT'S always nice to see a bright, young guy get ahead in the coaching business; and when the guy happens to be as bright, as talented, and as obliging as Al Sherman, it makes you feel twice as good.

When we heard that Al, after an outstanding career in pro football as a T quarterback and coach, was being brought in to convert the N.Y. Giants into a T team, we asked him whether he would be interested in putting his ideas down on paper for us.

Al not only gave us an enthusiastic yes but suggested that we shoot some exclusive pictures of him demonstrating the basic techniques. The whole project proved a happy success (see pages 7-9), and we are indeed beholden to him. It's guys like Al who make our life such a pleasant and easy one.

**H**AVING skinned through Elementary Sociology by the skin of a couple of football comps to the prof, we hardly qualify as experts on the subject and, thus, have always been wary of tangling with the professional socios.

There comes a time, however, when valor becomes the better part of discretion, and that time is right now. We believe that our socios are getting a bit fancy with their footwork and hence deserve a stiff block into the lap.

We refer specifically to their latest pastime—the business of sending teams of researchers into "typical" towns to explore and report on the quaint mores of the natives. Ultimately, these "findings" are collated, festooned with marvelous tables and charts, and called "a book about America."

It's a nice piece of razzle-dazzle, all right. But nine times out of ten,

the book either distorts the facts or tells you just about what you learned in that Soc I course in college.

What brought all this on is the latest "book about America"—*Democracy in Jonesville: A Study in Quality and Inequality*, by W. Lloyd Warner & Associates (Harper & Brothers).

Jonesville, of course, is a pseudonym—the socios have a natural horror for identifying their guinea pigs—for a typical American city (pop. 10,000), which, the author fondly believes, expresses "the basic values of 140,000,000 Americans."

Or, more poetically, "Jonesville is in all Americans and all Americans are in Jonesville, for he that dwelleth in America dwelleth in Jonesville, and Jonesville in him

... To study Jonesville is to study America; it is a laboratory, a field study for finding out what we are as a people and for learning why we think and feel and do the things we do."

Thereupon the socios start stomping polysyllabically through Jonesville's institutions, exposing its so-called caste system and the inequalities that actually exist back of its professed democratic ideals of equality.

And what supposedly is the snootiest of all Jonesville's institutions? The local high school, no less! Here's the way the socios put it:

"Learning things from books and life" in a friendly atmosphere was the ideal stressed in Jonesville High. Perhaps this occupation with friendliness on the part of the superintendent, principal, and teachers was related to the lack of friendliness in the student body, the schisms between class and religious groups, the club members and the nonmembers, the 'rich kids' and the 'poor kids,' the 'Americans' and the 'Poles.' Perhaps the students were learning about the business of life from their teachers and fellow students a little too realistically."

(Concluded on page 83)

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# Model T Quarterbacking

By AL SHERMAN, Backfield Coach, N. Y. Giants

*Left: Correct way to receive center pass. Back foot serves as the pivotal and front foot as the directional finder. Below: Laying out ball. Note that elbows are flexed and kept inside body, making ball as hard as possible for defense (in rear) to locate.*



**T**HE T Formation is a precision system, based on split-second timing and deception, in which every back must be thoroughly schooled in the various types of footwork involved in the play patterns.

The key back in the execution of these patterns is the quarterback. His responsibilities are both myriad and complex. In addition to calling the plays, he must serve as a middleman between the center and the ultimate ball-carrier. And that's a very tall order.

For, not only must he always maneuver into a specific position to hand off the ball, but he must deliver the ball on a specific level, to a specific spot on the receiver, and in the best possible fashion to deceive the opposition and send the carrier on his way.

As you can see, the success of every play depends largely on the quarterback's ball-handling and FOOTWORK. Never underestimate the importance of footwork. In coaching your quarterbacks, always remember that their footwork is just as important as their ball-handling.

If the boy's feet don't take him to the right spot, his ball-handling will suffer. For example, if he doesn't step out far enough, he may have to stretch too far with the ball, with the result that (a) he will fail to conceal it well, (b) expose it to enemy hands, and (c) not hand it off with the proper touch.

So, just as important as memorizing his plays, is the need to memorize his steps. "Think with your feet as well as your brain!"

Proper control of the ball is es-

sential for good execution. Therefore, let us start right from the time the quarterback lines up behind the center to receive the ball.

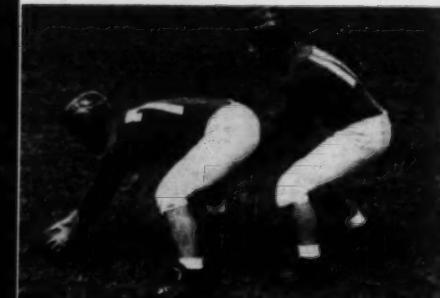
Before positioning his hands, the quarterback should properly plant his feet. Both feet should be spaced comfortably so that the player can go either way with equal facility. If the quarter intends to execute a reverse spin to the right, the right foot should be planted slightly behind the left with the toe about even with the left heel. For a reverse spin to the left, the procedure is reversed.

The knees should be bent slightly to allow for adequate give for spring and movement; and the back should be straight so that the quarter can look ahead and watch the defense while calling signals.

The head, incidentally, is kept loose and relaxed—a detail which permits the player to call signals and at the same time look either way to note who is following the man in motion, overshifting in the line, etc.

In positioning his hands up in the center's crotch, the quarterback should place his top hand firmly against the center's crotch with the fingers well spread to provide the best possible target. The pressure of the hand gives the center a sense of security and tells him exactly where the hand is.

The bottom hand is placed so that the heel of the palm touches the heel of the top palm. The fingers are well spread and point stiffly straight down, eliminating the danger of the center hitting the back



of the bottom hand before reaching the pocket.

The deployment of the elbows is also very important. The wise quarterback will keep his elbows bent so that he will be able to adjust to various situations.

In the event the ball is brought back too soon, for example, the bent position of the elbows will permit the arms to give with the pass. Or, if the center leaves his mark too fast, the quarterback will be able to move his arms forward by way of compensation. Both these adjustments radically reduce the danger of fumbles.

One point that cannot be overlooked in any discussion of the center-to-quarterback exchange is the fact that centers vary in their stance and ball-handling. The quarterback must hence study the characteristics of all his centers just as carefully as he studies those of his backfield mates.

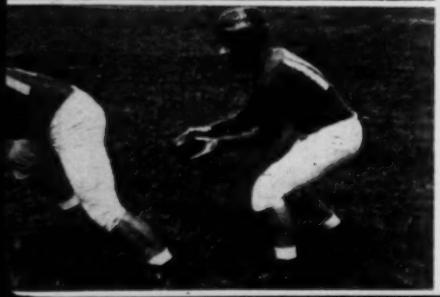
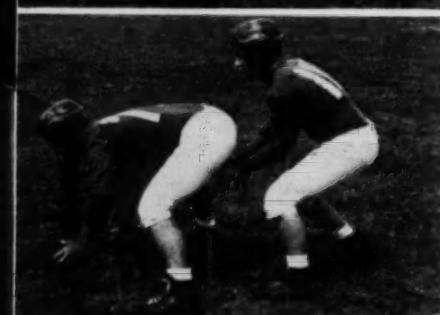
Some centers bring the ball up harder than others; some get away faster; and some assume wider stances. All these idiosyncrasies must be considered by a good quarterback and the proper compensations made to permit the best play execution.

When working behind a center who leaves his mark unusually fast, the quarterback may move his hands slightly forward at the snap. This will compensate for the center's leaving and will prevent the opening of too wide a gap in the exchange.

A center with a wider stance will naturally be closer to the ground, and a wise quarterback will bend his knees more to compensate for this.

This brings us to the reception of the ball and the start of the footwork. Immediately upon receiving the ball, the quarterback should tuck it into his stomach right at the belt buckle and simultaneously start his footwork.

As he tucks the ball into his belt



### CENTER to QUARTERBACK

**Author Al Sherman and Frank Pastuck, former Cornell center now playing pro ball, demonstrate the niceties of the T pass. Pastuck lines up with both hands on the ball, but shoots it back with only one. The ball is delivered flatly into the quarter's hands and the center gets away immediately. The quarterback lines up with the heels of his hands touching. The top hand is kept fairly firm against the center's crotch with the fingers well spread. The fingers of the bottom hand are also well spread but point stiffly straight downward.**

and gets his feet moving, he should keep his back fairly straight and his head up to assure the finest coordination.

The reason for the ball being kept at the belt buckle is twofold. (1) This provides the best concealment for the ball, and (2) it also provides a level hand-off to the receiver. By using the belt buckle as a guide, the quarterback will always be handing the ball off on the same level, a safety measure which reduces the fumbling menace.

In addition to assuring a consistent hand-off at the same spot, the buckle-to-buckle hand-off is an important psychological weapon. Once the quarterback gains all the backs' faith in his ability to place the ball where they expect and want it, they will execute the play speedily, easily, and crisply.

The hand-off should be fairly firm and given through the back, not to him. This will insure firm reception. In other words, the quarterback is responsible for the safe delivery of the ball. He places the ball into the receiver's belt buckle; he does not lay it out for the receiver to take. This gives the receiver only one thing to think about — getting to the hole as swiftly as he can.

After the ball is delivered, the hand and arm give about six inches with the receiver, so that there is no strain on contact. The quarterback may then carry out the necessary fakes.

Just as the quarterback must know his centers, so must he know his backs. Some backs hit faster than others; some hit harder; some like a harder hand-off; and some like a softer hand-off.

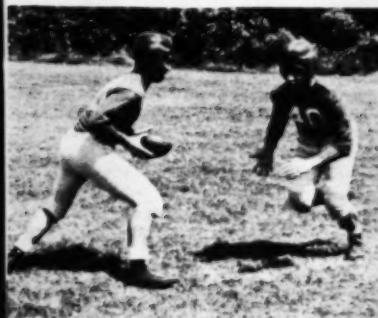
All these points must be catalogued in the quarterback's mind, and the necessary compensations made. For a back who hits faster, a quarterback must spin faster. For a back who likes a harder hand-off, the quarterback must use more pressure; etc.

Now let us look at the different fakes he can employ. Years ago, when the T burst into startling prominence, little was known about the system. Defenses were not as intricate as they are today, and the slightest hand-fake by a quarterback would send a backer-up or halfback scurrying out of position.

Now that more is known about the T, I believe that an empty hand-fake is a tip-off rather than a deceptive weapon. All it actually does is give away the fact that the back isn't getting the ball.

Today, most faking should be done with the ball, with both hands

(Concluded on page 69)

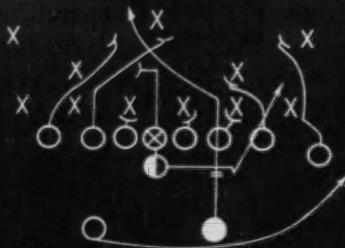


## BASIC PIVOTS

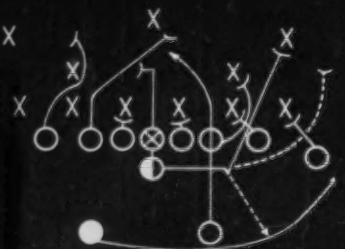
▲ FULL REVERSE SPIN

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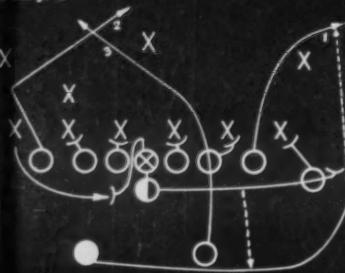




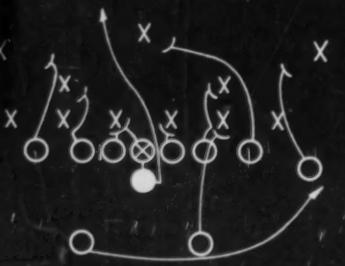
Diag. 1



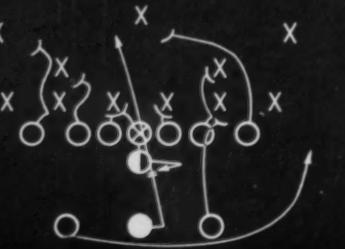
Diag. 2



Diag. 3



Diag. 4



Diag. 5

# Flanked

In this era of complex offensive football in which the emphasis is on a variety of plays or variations of plays against a number of difficult defenses, I believe the best system is one which can be effective against all defenses, which possesses a minimum of plays, and which can be taught easily and quickly.

The fewer plays and assignments, the more time the coach and team have to concentrate on fundamentals.

Admirably suited to these requirements is the Split T with or without a flanker. It is ideal for either college or high school teams, but particularly so for the latter because inexperienced, immature boys aren't capable of learning and executing a large number of plays.

What I mean is this: With football becoming more and more difficult to coach effectively because of looping, slicing, and overshifted defenses, there is reason to believe that a simplified system which can be taught in a limited time and which can force the opposition to meet it with an orthodox defense would be worth examining.

The Split T with a flanker (if necessary) can offer an adequate offense entailing only ten plays. Before I diagram these plays, here are the advantages of this system:

1. Its simplicity. In nine of the ten plays the pattern is similar, and the blocks are nearly identical—no worry about delicate timing on trap plays!

2. The guards aren't required to pull out and lead interference.

3. The halfbacks may be small and not be at a disadvantage.

4. A flanker may be used when necessary and, as the diagrams show, the defense will not be able to shift with confidence to meet the power on the side to which the flanker goes.

5. An "honest" defense may therefore be expected. The five-man line will prove vulnerable because five men won't be able to cover the potential holes made by the wide spacing.

6. Tremendous pressure is imposed on the defensive end and tackle, and the strong-side linebacker and halfback.

Further, the disadvantages of the regular T may be nullified by the use of the fullback as a flanker to send into the secondary as a pass receiver or blocker. And, remember, since the middle back in the T is the flanker, the defense cannot safely shift to meet the power. If it does, the dive tackle to the short side will prove very damaging.

The fullback can be used in a majority of the plays without tipping off the defense; but, of course, he should not stay in the backfield only when he is to carry out Play 5. As a matter of fact, Play 5 is not vital to the attack, for No. 4 will keep the middle occupied.

Here are the ten basic plays which can carry a whole offense, all other factors being equal:

**Diag. 1, Dive Tackle:** The best play and the longest gainer except for the Pitchout. The ball-carrier hesitates until his tackle crosses in front to hit the safety; then reverses his field sharply.

The quarterback continues along the scrimmage line, fakes a pitchout to the left half, and cuts downfield through the hole between the tackle and end. A good fake by the quarter and left half are important to fool the secondary.

**Diag. 2, Pitchout:** Can be used as an option if Play 1 is jammed up and the end is crashing. This often forces the defensive end and halfback to make wrong decisions. The end knocks the tackle in, the tackle whips around the block and gets the backer, and the quarter plays the end.

If the end is in tight, the quarter laterals to his left half and cuts downfield again. If the end has fought off the flanker and is outside, the quarter fakes a lateral.

## QUARTERBACK PITCH-OUT

Upon receiving the ball from center, the quarterback pivots on his rear foot (left) and steps in the direction of his target with the front foot (right)—meanwhile keeping firm control of the ball with both hands. The pitch is made with a long, smooth, underhand toss, and leads the receiver. Note the flexible position of the knees, the erect head, and the follow through.

# Split T

keeps the ball, and runs through the hole. The half swings around fast and tries to get into position for a downfield lateral. If the hole is too jammed to run through, the quarter laterals, cuts outside the end, and goes down for the halfback.

The Quarterback Keep, of course, is not a separate play, but one which the quarter can always run if Play 1 or 2 go wrong or the end is floating. While it requires quick thinking by the quarter, the play puts pressure on the defense.

**Diag. 3.** Running Pass: This is alternated with Plays 1 and 2, but the half *must* pass if he can as he comes around the turn and heads toward the scrimmage line so the defensive half and backer will be confused. It's best to make sure of

**By John E. Aker**

Newman School, New Orleans, La.

the end here, so the flanker stays with him until the play has gone past, and the quarter may help him or keep the backer from crashing.

**Diag. 4.** Sneak: Effective if the guard and tackle are piling up Plays 1 and 2, this can be run from a high position before the command "Ready!" The quarter takes one step to the right as in Plays 1 and 2, then cuts through the gap between the guards. He should reverse his field if possible once he is in the secondary.

**Diag. 5.** Center Buck: Quarter has to stay parallel to scrimmage line! He does a to-the-rear march

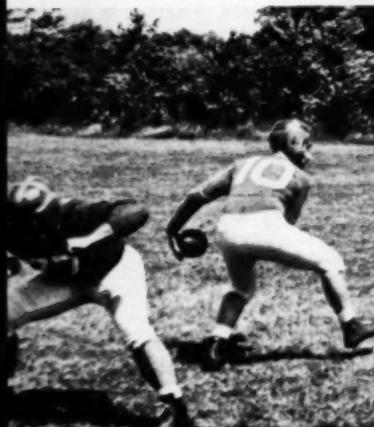
and hands off to full, who has delayed one step and has cut back at an angle. This is the only play in the system which cannot be run if the full is the flanker. The ends must cut down the half and safety. Often this will enable the full to go all the way.

**Diag. 6.** Quickie: Best with a flanker to check the end. While dangerous, it often will catch the half and backer out of position. The quarter makes no fake, but fires the ball as soon as he gets it. On a variation of this play, Glenn Davis broke up the 1943 Army-Navy game.

On all passes except the quick flat pass, the quarter should make his fake and retreat into the pocket three to five yards.

I am convinced that passers should never go deeper than five yards unless they have to! On all the remaining passes except the spot pass and the flat pass, the center delays after the snap to stop any linebackers plugging, then drifts to his left to pick up the short-side end. Against a five-man line, he is responsible for the man

(Continued on page 84)



**D**ESPITE recent emphasis on the short-passing game and on the different phases of the running attack, the long forward pass continues to be the greatest clutch weapon in modern football.

When properly employed, it constitutes the most spectacular scoring weapon in the book and offers the quickest and surest means of scoring in a hurry from far out. At the same time, it exercises a demoralizing effect on the opponents assigned to cover it.

These are but a few of the general attributes of the long-passing game. More specifically, it represents an effective device with which to counter such defensive deployments as the 6-3-2, 5-3-3, 5-4-2, 4-4-3, and 4-5-2, none of which can, at the same time, sufficiently pressure the passer while adequately covering deep.

The long pass also is sufficiently flexible to permit adjustment against the various other defenses and its strategy involves little risk. At worst, it can only be intercepted—which, on a long throw, is as good as a punt. On the other hand, long passes tend to conserve both playing time, which is often important, and playing personnel, which is always important.

The deep-passing game is easy to install and can be integrated nicely with both the running game and with the short-passing phase of the attack.

Because of the T's ability to spread the defense laterally through use of motion and flankers while at the same time drawing it up close with the threat of quick-hitters and snap-throws, the long-range possibilities of this style of play are tremendous.

In developing the deep-striking attack from the T, it is important to proceed in accordance with certain basic considerations. Foremost among these is the principle that the long-throwing game constitutes a distinct and highly specialized phase of offensive football. Therefore, it is essential that the deep-passing attack be accorded separate

By ROBERT C. MacKENZIE

University of San Francisco

# Deep Passing

and important treatment in its own right.

Experience has demonstrated the soundness of placing reliance upon specially designed long-striking pass plays, as opposed to the all-too-frequent practice of simply throwing "high and far" to optional deep receivers running out on all-purpose patterns.

A second principle is that of affording maximum protection to the passer. On long throws, it is usually desirable to send out fewer receivers and thereby make it possible to retain greater blocking strength around the passer.

In this connection, it is vital that the defensive men who are rushing the passer, be kept off balance by variations in the blocking protection. This may be done through the use of a number of assignment patterns, as well as by having the passer throw from different spots or "pockets" behind the line.

The plays hereinafter described, represent a few examples of the manner in which the foregoing considerations have been applied to the construction of far-striking pass plays from the T. Embodied in the selection are varied receiver patterns and blocking arrangements against different defenses.

Among the most feared pass plays in modern football are the T-formation's quick-breaking "rainbows." On these, the key receiver is a backfield man who bursts through the line—usually just off-tackle. Once past the close scrimmage area, he speeds into the clear by "rainbowing": either in or out, across, down or straight, depending upon the prearranged lure of the decoys

and the particular draw of the offensive backfield faking.

The play in **Diag. 1** is a simplified version of the "rainbow-straight" as set up against a conventional defense based on a six-man line.

The offensive left-end splits away from his tackle to a station slightly outside the widest position which the opposing wingman will take under the circumstances. By widening in this fashion, the offensive end tends to draw with him the defensive half-back on that side. As a result, the offensive flanker is able to keep two defensive men out of the play—the opposing end whom he blocks (as shown) and the defensive half-back who does not dare leave him uncovered lest he slip the block and slide out as a delayed receiver.

On the other side of the line, the offensive right end angles out as shown, going just deep enough to insure being picked up by the middleman in the defensive rear rank. Once this has been accomplished, the end decoys that defender far to the right.

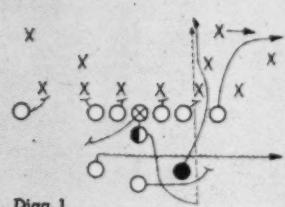
The other defensive halfback already has been drawn over and up to cover the motion of the offensive left halfback.

On the snap of the ball, the quarterback fades swiftly behind the protection of his blockers, then fakes a wide throw to either the right end or the man-in-motion.

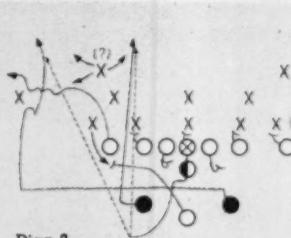
Meanwhile, the right half has darted between the defensive end and tackle. He breaks past the linebackers, usually just inside the man on his side, and races down the lane which has opened up through the middle.

The quarterback rifles a long one out to him, and the speeding receiver has only to take the ball over his shoulder and keep ahead of his pursuers.

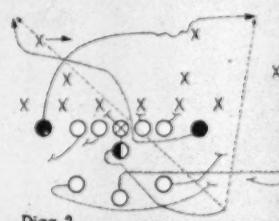
There are numerous variations of the rainbow pattern. One of the most unusual is the maneuver in **Diag. 2**



Diag. 1



Diag. 2



Diag. 3

# Game

in which the primary receiver is broken out of a stutter effect, worked in with a bit of screening and some stop-go tactics. The play also illustrates the practice of opening the offensive line to the side on which an end is flanked.

The man-in-motion executes a short downfield hook in front of the defensive halfback covering him. While executing the quick stop and pivot, the offensive player notes the path of his own left end who is coming over rapidly to screen the defensive right half. Cutting close behind the screening end, the motioned back abandons his button-hooking tactics and goes straight and deep downfield.

Meanwhile, the offensive left half, instead of making an immediate break as did the key receiver in Diag. 1, delays a split-second with a jab-step and then slips off-tackle behind the fullback as the latter crosses to block the incoming defensive end.

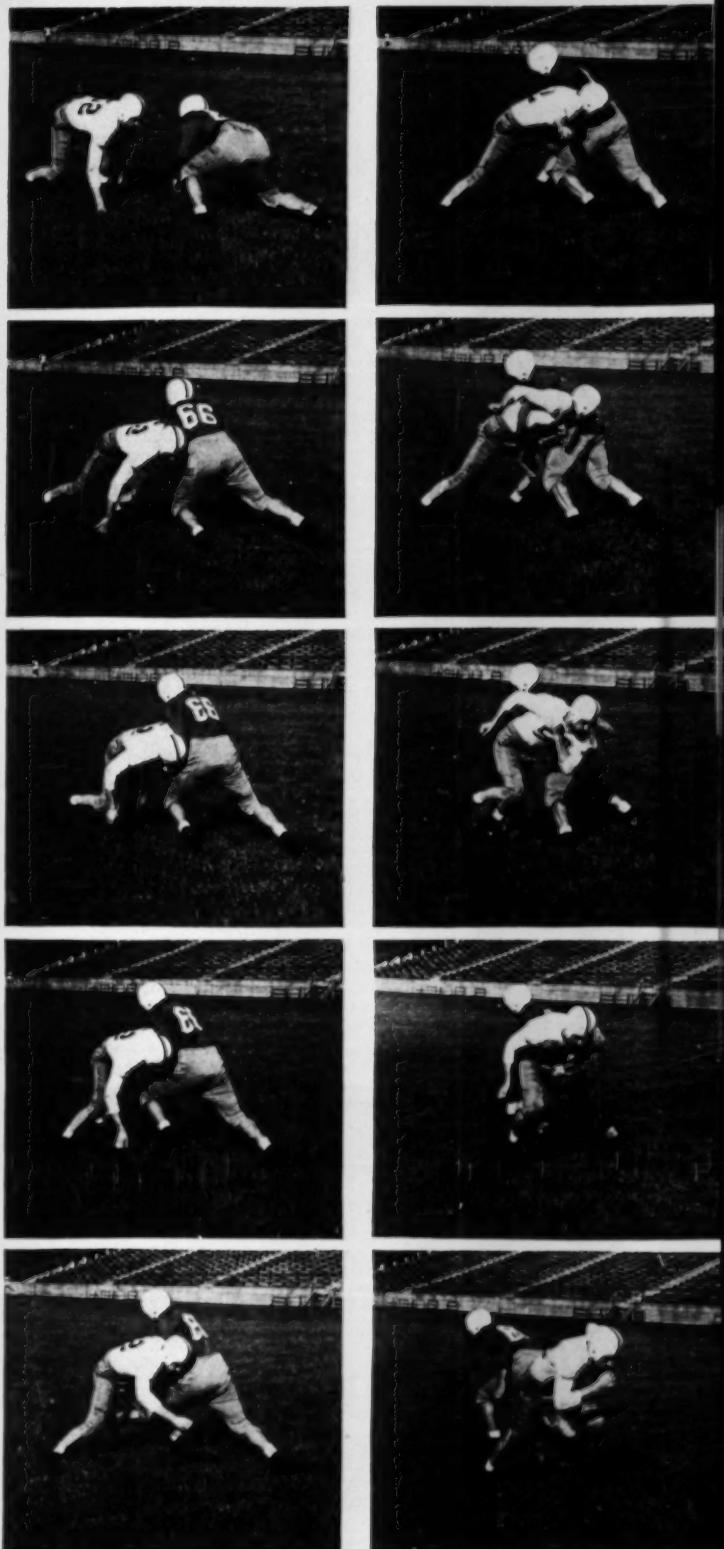
The resulting pattern is one in which both halfbacks are sprung into the open on parallel courses straight to the goal line, but which are sufficiently separated to prevent facile coverage on the part of the opposition.

The rainbow-stutter is of special interest because of the manner in which it throws a terrific burden of decision on key defenders. The middle man in the deep defensive secondary is in the most difficult position. If he picks up the left end, he will find that a successful screen of his colleague on the right by that offensive player, will leave both defenders, in effect, covering the same potential receiver while the man-in-motion races into the clear. Hence, the safety and the defensive right half must switch expertly to avoid trouble at this point.

(Continued on page 60)

## BRUSH BLOCK

In this type of block, the lineman shunts his man aside just long enough to keep him out of the play, then releases and goes downfield for a secondary block. As demonstrated here (at Rutgers U.), the lineman drives his near shoulder into his man's side, brings his rear leg up, and drives his foe to the side with a hard forward and lateral lunge. With hardly a break in his stride, he then slides off his man, brings his free leg forward, and continues downfield.



# The Open Huddle

ACCORDING to an old saying, there is nothing new in football. This is true more often than not. Most so-called "new" formations and strategies are merely dressed-up variations of old themes.

That's why I do not claim to be the inventor of the Open Huddle. I am sure it must have been employed by other coaches in the past. But, so far as I know, it originated at the University of Akron while I was coaching there with Otis Douglas just before the war.

One of our biggest headaches was too much talking in the huddle. One day I suggested trying a huddle in which everybody was out in the open so that any conversation could be spotted from the bench.

That was the birth of the Open Huddle. We used it consistently at Akron and it was later adopted by the Brooklyn Dodgers when I was playing with them. Boston University picked it up after I showed it to Buff Donejli and, of course, we use it here at McGill.

The huddle sets up as follows. Soon as the play is over, the center takes a position 10 yards from the ball, facing it. He raises both hands and the other linemen fall in alongside him in the front line. This includes the two guards and the two tackles, all of whom place their

By VICTOR F. OBECK  
Head Coach, McGill University

hands on their knees.

The rear line is made up of the two ends and the other three backs, who set up with their hands on their hips.

The quarterback lines up in front of the group, facing it. He bends slightly at the knees and looks forward and up at the players, keeping his hands on either side of his mouth to amplify his voice.

The accompanying picture shows the McGill team demonstrating the huddle. You will probably notice that there are 12 players. This is due to the fact that Canadian football is played with 12 men on a team. In the American game, the players would line up in two rows of five, as previously described.

After the quarterback gives the signal, the center leaves the huddle immediately. As he passes the quarterback, the latter gives the signal to break.

It is very simple to go into the T from this huddle, and it is also easy to step into the right or left single wing formation. The simplicity of the arrangement eliminates any danger of the confusion sometimes caused by the wheel out of a closed

huddle (the conventional modus operandi).

Among the many advantages of this open huddle are:

1. The whole team faces the ball and the opposing team. Therefore, when the signal is given, the men do not have to look for the opponents they are coming out to block—they have been looking at them all the time. This eliminates the danger of give-aways.

2. The quarterback, who is in front of the group, is able to give his signals directly to the whole team. They are not only able to see him, but his lips as well. Everyone will agree that a person can understand a speaker much better where he is able to see him talk.

3. It is a very fast huddle to get into and get out of.

4. It completely eliminates talking in the huddle, since the talker can be heard by the other team and seen by the coaches on the bench. The quarterback is the only man in position to talk, since he is facing away from the opponents.

5. It eliminates the possibility of a tired player leaning on another player, not realizing that the second man is probably just as tired as he is.

6. There is a psychological advantage to looking at the other team's defense and the enemy goal line during the whole course of the huddle.

7. I believe it is easier to draw a recuperating breath from an upright position.

8. I believe the spectators like it better because it does away with the whole idea of a secret conference which often seems to take too much time.

I am sure that if you are interested in using this huddle, you will be able to work out various modifications to fit into your specific situation and system.

*(Ed. note: A few days after this article was received and set up in type, Frank Leahy announced that he intended to install the open huddle at Notre Dame this season. Leahy freely admitted that he received the idea via a letter from a Canadian high school coach. The huddle he will employ is substantially the same as the McGill type. For details on the Notre Dame plan, refer to the *Here Below* editorial on page 5 of this issue. Vic Obeck, incidentally, is a Springfield College grad who played pro ball with the Chicago Cardinals and Brooklyn Dodgers. After several years of coaching at the U. of Akron and Columbia, he is now installed at McGill U. (Montreal) as director of athletics and football coach.)*



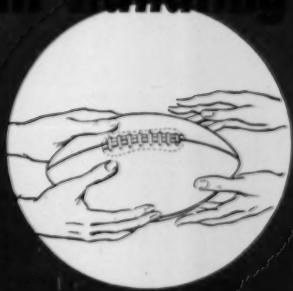
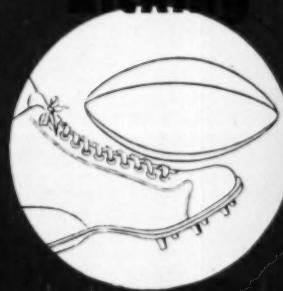
The McGill U. football team demonstrates the new type huddle.

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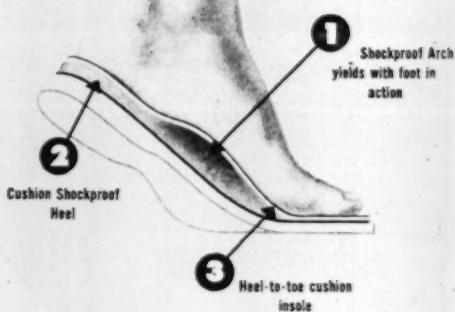


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By GLENN F. H. WARNER  
Soccer Coach, U. S. Naval Academy

**B**ROADLY speaking, the soccer coach has three major responsibilities: He must condition his boys physically and mentally; he must teach them the fundamentals; and he must mold them into a smooth-working unit.

The first objective is to get the squad into shape. The coach should point out that the first few days of training are very important, and that each individual will be responsible for the amount of exercise he takes.

Many players try to do too much the first couple of days and, as a result, wind up with blisters, soreness, charleyhorses, etc. A properly graduated training program will drastically reduce the charleyhorse and soreness menaces, while proper care of the feet will minimize the blister bugaboo.

The feet rate particular consideration, since they are used more in soccer than in any other foot game. It is always a good idea to warn the boys about breaking in new shoes. The training period is a poor time to do this, since the feet haven't had a chance to toughen up.

If the boy must break in his cleats early in the season, he should keep a pair of tennis shoes available on the sidelines so that he may put them on after a short go with the new cleats. A gradual breaking in of the shoes will pay off in less irritation to the feet.

Tape and bandages are not advocated unless the player has a definite weakness. A good taping will protect an injury, but it may, when used unwisely, prevent the injured part from strengthening itself.

Many coaches believe that there is a definite place for calisthenics, and there is no question that calisthenics can help strengthen the vital knee and ankle joints. Push-ups and sit-ups may be employed to develop the arm and stomach muscles, while the legs and wind may be built up with running (both sprints and distance).

#### TEACHING THE FUNDAMENTALS

Perhaps the best conditioner in the early season is the work on fundamentals—heading, tackling, kicking, trapping, dribbling and passing. Special attention should be given to the teaching method. The game method is usually deemed the most feasible from the standpoint of arousing and sustaining interest.

Dribbling, for example, may be

## BOOTING ABC'S



taught in the form of a competitive relay. You may set up any number of five-man teams with each boy five yards behind the other. At the signal go, the first man in each line starts dribbling the ball in and out, up and back, through his four teammates acting as posts. He brings the ball back to the second man, who repeats the procedure, and so on down the line. The team finishing first is declared the winner.

#### KICKING FUNDAMENTALS

It is a simple matter for a coach to discover the more experienced players on his squad. All he has to do is observe them kicking a ball. The experienced men will boot with their instep, while the green boys will kick with the toe.

The proper use of the instep should be stressed continually. A medicine ball can be put to good use to demonstrate the proper contact, and the use of tennis shoes for the first week will also help discourage the boys from using the toe.

One of the better ways of teaching is through demonstration. This can be done by the coach himself or by

experienced players with the coach explaining. Some points to stress are:

1. Get over the ball (line up the eye, knee, and foot on contact).
2. Don't reach (standing foot should be at the side of the ball).

3. Follow through in the direction of the target—most of the power is derived from the snap at the knee joint.

During the demonstration, all the various types of kicks such as the general kick, the pivot kick, the stab kick, the push kick, and the volley kick should be exhibited and analyzed. If the budget permits there should be one ball for every four players. It is extremely difficult to work with only one or two balls.

#### BALL-CONTROL (TRAPPING)

Trapping is a type of ball-control which calls for good timing. To trap a ball means to smother it and prevent it from rebounding away from you. Various methods may be used, depending upon the situation. Some of these are: The foot trap, the leg trap, the two-leg trap, and the chest trap.

A player will seldom get an opportunity to control and pass the ball unless he masters the trapping art, and the best way to do this is to take every approaching ball as a direct challenge and attempt to bring it to the ground under control. Half-hearted efforts do more harm than good and should be checked by the coach.

#### BALL-CONTROL (DRIBBLING)

Dribbling, if not carried too far, is another important phase of ball-control. In this fundamental, we are concerned with the ability to move the ball with the feet, never letting it get too far away. The skill should be used as a way to draw a defensive player to you before making a pass.

A wing may employ the dribble on a quick break down-field before crossing, while any of the forwards may use it to break through the defense for a shot at the goal. The dribbler should always remember that his success in fooling one man is no excuse for becoming cocky and trying to dribble through the entire team.

The good dribblers control the ball with the sides of their feet, not the toes. Where the ball is dribbled with the toes, it is apt to get too far away from the dribbler and therefore out of control. The requisites for an outstanding dribbler include speed, change of pace, ability to fake, etc.

Passing is a phase of ball-control that is largely determined by teamwork. In a good passing attack, every

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player knows where his teammates are. This is essential inasmuch as a lot of passes are made to a spot rather than a man.

In addition to accuracy, the pass must have the right amount of speed or power. A pass with too much pace may rebound away from the receiver and thus be wasted.

The pass should never be made with the toe because the ball is too hard to control this way. The sides of the feet afford the best type of control.

Various types of passes are utilized, depending on the situation. If the team in control succeeds in drawing a concentration of defenders to one side of the field, a long pass to the far wing is in order.

A back pass is a definite part of the game and is used primarily by tied-up linemen in clearing to their halfbacks.

The short pass is often used in working the ball down-field in various combinations. An example would be the triangle play involving an inside forward, a wing, and a halfback passing around an opposing halfback.

While the short-passing game is excellent, it can defeat its purpose when overdone. Too much short passing may give the defense time to get set in the penalty area and thus clog this vital territory.

It is difficult to develop a passing game on a minimum sized field because the constricted playing area cuts down the angles necessary for passing. A technique called "making space" should be stressed here. This is merely a way to prevent crowding.

For instance, in making a pass, never follow it up or stand around and admire it, but cut to a new position. The defense must be spread, and this cannot be done if you load one area. If a wing cuts into the inside's area for a pass, the inside should switch quickly to the outside. Take advantage of all the available space and make the defense cover it by drawing them out. Never make a pass until you have drawn an opponent to you.

#### TACKLING TECHNIQUE

Tackling demands good timing or judgment. Against a clever dribbler, too aggressive a tackle may prove embarrassing. In making a tackle, make your move just as the ball leaves the dribbler's foot. Don't try to outguess the man with the ball; let him make the first move.

Another thing: Never leave your feet. This is "dangerous play" and in most cases only results in the dribbler getting by. A tackle may also be made by lunging to the side

and sliding the leg into the ball for the block.

The important thing to remember is to get the weight of the body behind the tackle. It is a waste of time to merely stick out a foot while keeping the body back. Even if the ball is touched, the player in possession can generally brush the foot aside through his impetus alone.

Keep your eyes on the ball and try to get both feet in front of it, with the heels together and the body leaning slightly forward. This will put the full weight of the body behind the tackle and give you a better chance of coming through with the ball.

The tackler is always on his own, and any type of tackle which achieves the object of getting the ball without fouling the opponent, is probably a good one. Another important essential to remember is to make the tackle so that if you don't succeed, you will be in position to recover quickly and get back into the play.

The shoulder charge should not be neglected as a method of tackling. When timed properly, it can prove a very effective tackle. However, unless executed correctly, it will develop into a charge with no thought to getting possession of the ball. The player should be careful not to raise his arm to "lift" an opponent; this is a foul.

#### HEADING TECHNIQUE

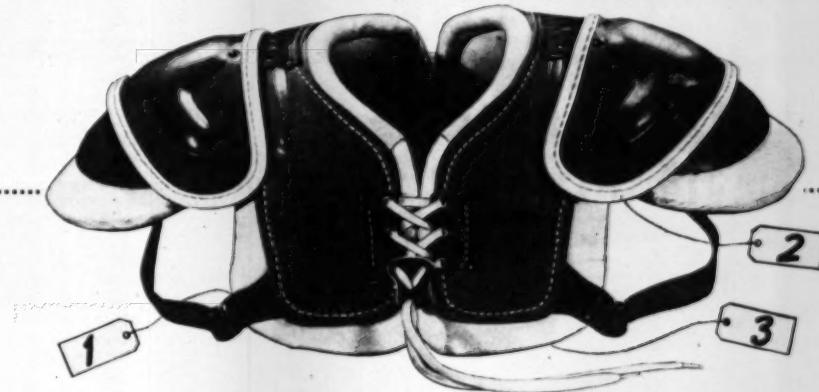
Much time should be spent on drills that develop the neck muscles involved in heading. Good timing is needed to prevent the injuries and headaches which occur when the wrong part of the head establishes the contact.

The forehead, not the crown, should make the contact, and, to further reduce shock the feet should come off the ground. The eyes should be kept on the ball as long as possible. Closing the eyes and pulling in the neck are indications of a beginner.

The need for accuracy should always be kept in mind. This concerns a mid-field headed pass as well as the head shot for goal. Too many times a headed ball in mid-field is recovered by the opponents. Where your opponent drops back, it is smarter to fake with the head and trap the ball instead.

To obtain maximum power, the neck must be brought forward at the moment of impact. In most instances, the aim should be to the feet of a teammate. To do this, the neck must move forward, followed by a forward body movement, and the chin

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must be brought inward, finishing well tucked in so that a downward flight of the ball is produced.

In heading a ball laterally, the side of the forehead must be used with the neck being twisted sharply either to the right or left. The taller player definitely has an advantage on headed balls, but the shorter man, with perfect timing and good jumping, can frequently hold his own.

### THROW-INS

On throw-ins, the stress should be on possession. The ball must be thrown, not dropped, and part of both feet must remain in contact with the ground throughout the throw.

Stress should be placed on both the long and the short throw-ins. The short throw may be employed as a set-up for the halfback, while a real long throw-in might surprise the fullbacks and result in an assist for a goal.

Distance may be acquired through a run and plenty of snap from the back coordinated with the forward swing of both arms.

### SELECTION OF PLAYERS

Before picking his players for the various positions, the coach should have a clear-cut conception of the necessary requisites for a good player. They might be:

Speed, endurance, ability to kick well with either foot a ball coming from any angle, good tackling ability, good heading ability, agility (ability to stop and start quickly and change direction), good ball-control, ability to team up with others, courage and the desire to win.

Some of these requisites are of more importance in one position than in another. For example, it is more important for a halfback to know how to make a good tackle than it is for a wing.

The goalie should be tall (6'), possess quick reactions, have had basketball experience, be fearless, have large hands, be able to throw and punt with a fair degree of accuracy and strength, have the voice and knowledge to direct his defense.

The fullback should be good sized (6', 200 lbs.), be able to kick with either foot (seldom, if ever, miss-kick), be aggressive, be a good tackler, have good judgment in switching and covering with other fullback, have ability to get up in the air to head balls out of danger.

The halfback should be aggressive, have speed (size not too important), be a good tackler, have a

(Continued on page 58)

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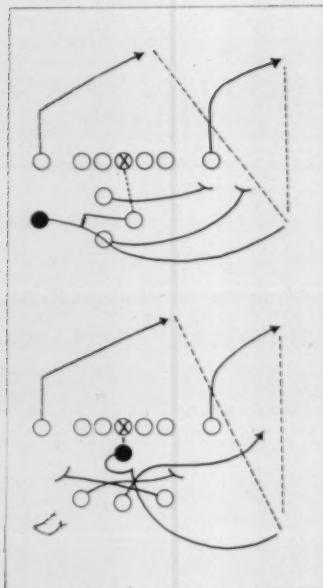
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# Play Spotting

By JOHNNIE GOLDEN

Gilroy (Calif.) Union H. S.



Diag. 1, Shaw Pass Pattern



LIKE the good old "Philadelphia Lawyer" who would blast an entire case apart at the final moment with the introduction of the "missing witness" or some insignificant bit of evidence, such as lipstick.... the modern-day football scout must guide coaching staffs through a wilderness of technicalities, habits, give-away mannerisms, and pet variations of rival coaches and players.

The slightest of such idiosyncrasies often mean the winning or losing of a crucial game. So numerous are these intricacies, that space doesn't permit their listing. I have tried to fit the majority of them into the final paragraphs of this article so that the reader, at some later date, might turn them over in his mind.

The portions I will deal with at this time are those which I feel are positive "musts".... and need separate mention.

Football scouting today is big business. The work of the seasoned scout is amazingly polished and, above all, thoroughly accurate. This type of reporting is developed only through long hours of study and practice.

The following four phases of scouting generally are the weakest areas of the beginning scout, and it would be to his advantage to take inventory of his strength in these departments.

1. The scout must have a thorough

knowledge of all offensive and defensive formations. He must be able to immediately recognize standard systems of blocking and passing patterns.... as well as the numerous standard defensive alignments.

Variations in spacing, individual stances and tipoffs, must all come as second nature to him. The slightest variation of a single-wing tailback or a T formation Q. B. may be the key to the subsequent play.... a play that might mean the ball game!

From the beginning, the scout should take enough pride in his job to make the finished report a real

work of art. To do this, he must arrange his schedule so that he doesn't cover a team too early in the season. Also, if possible, he should scout the same team more than once. This will enable him to catch the team during a period of improvement and thus recheck and better the fundamental information he obtained the first time. An early report is often misleading due to changes in personnel as well as offensive and defensive adjustments that come later in the season.

The scout and the coach should work together and try to cover a team when it is playing strong opposition. Coaches who have the same scout cover the same teams every season, are doing both the scout and themselves a big service. This enables the scout to familiarize himself with the give-away habits of both the team and the coach.

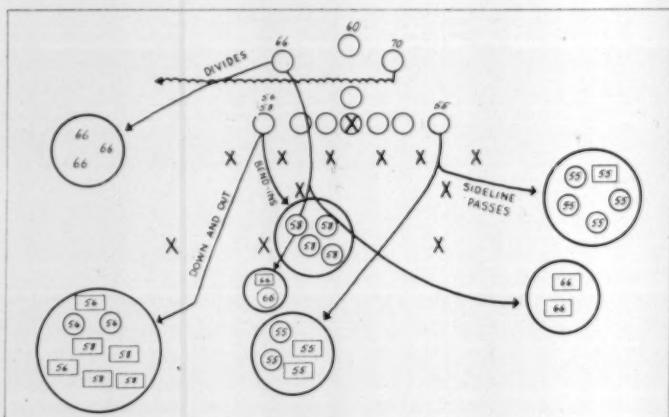
Diag. 1 shows a movement the experienced scout may pick up in regard to the coach. The upper play shows a successful pass pattern used by Buck Shaw at Santa Clara in 1938-39. Below it is practically the same pattern that Shaw employed with the San Francisco 49ers ten years later.

Note that the first pattern worked from a single wing and the second from a T. It is the tendency of all coaches to swing back to their bread-and-butter plays no matter what system they switch to.

Such analysis is of the greatest importance to a rival coach since it enables him to adjust his defense.

2. Another weak point of the beginner is his tendency to bank too heavily on programs, newspapers, and public address systems for information he should have memorized.

(Continued on page 26)



Diag. 2, Summary Sheet Compiled from Regular Play-by-Play Sheets.

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The scout, knowing in advance the team he is going to cover, should make it his business to know something about each player. He should know their names, numbers, weight, height, and even such mannerisms as to how they walk, run or pose on the playing field.

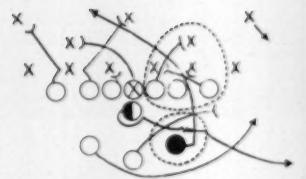
Some of this material can be obtained from other programs, school publicity departments, visits to the practice field, or scouting reports of other years and movies of their games. If this material is lacking, the scout may lose all account of an important play while searching for a number or position on the program.

In this day of numerous substitutions and specialists, there is no time for program scanning. Many times, also, the newspapers and P.A. systems are in error on some point that might be of extreme importance to the report.

If the scout will put in long hours of study on these phases, he will be able to cover a game in mud, rain or semi-darkness . . . and still come up with a fair report.

3. Probably the most important point in all scouting is to report plays as you actually see them. Never draw upon the imagination to chart a play in which you have missed the key portions. Coaches are human beings. They realize that a scout can only see and chart a certain amount. But, above all, they want a true picture of what he does see.

Again, we might liken the connection between scout and coach to that of the British Soliciter and Barrister. The Soliciter (scout) must



Diag. 4, T Play Patterns

get all the facts straight before turning the job over to the Barrister (coach) who must plead the case.

The efficiency of the preliminary work done by the scout, should have a great bearing on how well the coach can present the material to the squad. Modern football moves rapidly and the best of scouts gather their material bit by bit . . . but exact!

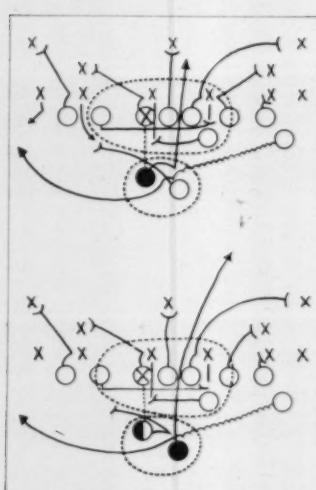
Much line play, as well as that of the backfield, is fundamentally the same and it isn't too much of a sin to miss some of this.

If, however, you have made a thorough study of all systems, you will be easily able to pick up the "out-of-the-ordinary stuff" that is woven into some standard attacks. The scout should know where to look for key blocks and patterns that get the play on its way. Some coaches refer to these as "bread-and-butter plays."

If you devote proper time to football analysis, you will be able to concentrate on one thing at a time and anticipate what is coming. If you feel doubtful about how a certain play was run off, chart what you think happened. Keep the pattern in mind and when you notice it developing again, check the moves against what you thought happened the first time.

4. Another bad habit of the beginner is to try and complete the report during the game. Unless time is of the greatest essence, this practice shouldn't be attempted. Probably late in the evening of the game or early next morning, the scout should transfer his rough notes to some type of an outline chart. Here he should try and play the game over.

Like crime detection, it is the criminal returning to the scene of the crime to take last minute stock



Diag. 3, Single Wing Patterns

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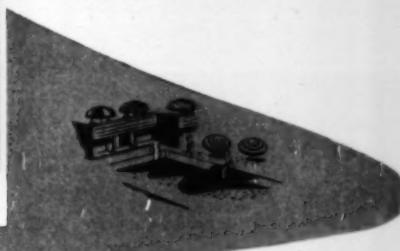
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of any error. If you have really concentrated on the game, it will be surprising how those plays will flash back in your memory.

Finally, the report should be entered into a scouting form, so that the coach can almost visualize a play-by-play account of the game. The scout should be able to form an interpretative analysis of the contest and include it in his report. It is possible to turn in a complete running account of the game without offering much beneficence. Unless some analysis can be drawn from it, the report isn't truly sound.

Having offered several ideas that might aid the beginner, I would now like to present the phases of the game that I feel are of the greatest importance toward any successful report. First of all, in this day of wide-open football with the emphasis on passing, I feel that the most important duty a scout can fulfill is to pick up the passing strengths and weaknesses of the team he is covering.

Today it is next to impossible for a defensive halfback to cover an end charging into his territory. The T flankers and spreads have made those zones too large for man-to-man operation. Therefore, it is much better to learn where they like to throw, and mannerisms about the thrower and receivers.

Diag. 2 shows a chart which I use in analyzing these movements. This may not be the best system there is, but it certainly does turn up some interesting data. This summary chart is compiled from the regular running sheets used during the game.

The circled numbers indicate completed passes, while the blocked numbers show the incompletions. As you may see, No. 58 is strong on short bend-ins behind the linebacker, No. 55 is effective on sideline passes, and No. 66 wreaks havoc on short divides. On the other hand, the long down-and-out passes to 56 and 58 are weak.

(Continued on page 66)

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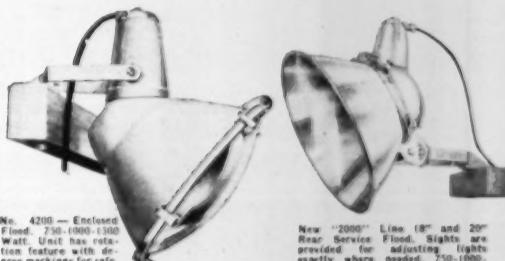


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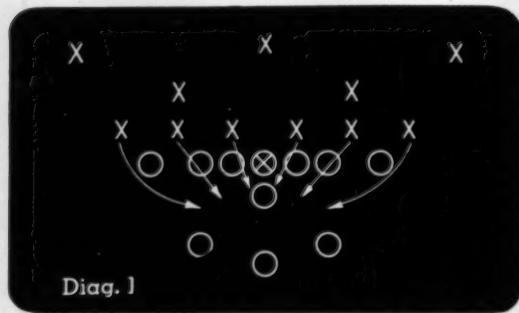
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# The Smashing Six

Diag. 1



By G. O. WATSON

Liberty Memorial H. S., Lawrence, Kan.

After trying looping lines, delayed charges, and split tackles with all the four, five, six, seven, and eight man variations, we here at Lawrence have always returned to the smashing six as our basic defense.

Tell a boy he has one thing and that alone to do, and the chances are that he will go ahead and do it. We do not encumber him with any alternatives. When the ball is snapped, he must charge hard and low to his inside. That is all.

Our guards are stationed about head on with the opposing guards, against a balanced line; and are squared away directly over the player to the right or left of the center man, against a balanced setup. This head-on stance minimizes the blocking angles.

The guards play as far apart as possible without splitting. Any gain through center, hence, is directly their responsibility. They are instructed as follows: "No one comes through inside of you! Plug that hole! Charge first, lowest and hardest. Take your man into the hole with you. Pile it up in the center." Boys like this!

The tackles deport themselves in similar fashion. We attempt to play them either directly in front of the opposing tackles or directly over their ends, depending on how wide they spread their offensive line, how good the opposing man is, and, to a slight extent, on whether the offensive backfield is built toward or away from that tackle.

The tackle plays very low and smashes hard and viciously to his inside. Anything coming through between his original spot and the point where the guard blocks, is definitely his responsibility.

Again, if possible, we try to carry the body of the opposing tackle into the hole with us. If the tackle pulls

out, our tackle first fills the hole and then, after the threat to that hole is past, takes after the ball-carrier.

The ends have a tougher assignment. Big, rugged ends—while not an absolute necessity, help. Aggressiveness, speed, determination, and courage can make even a little end a mighty man in this kind of football.

Orthodoxy is thrown to the wind. The end lines up definitely outside the opposing end and gets across the line of scrimmage as fast as he can. It is his job to go under and take down any and all interference.

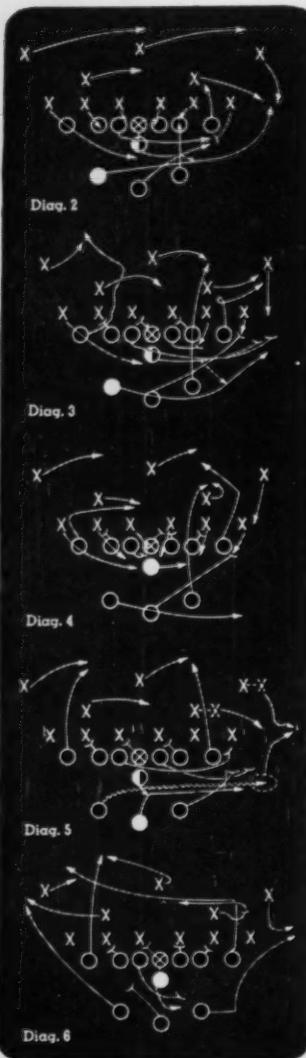
He smashes at an angle, and soon learns to go under interference as it forms. A guard and a wingback or blocking back just getting underway, is his meat. He also must stop all off-tackle slants between his position and the tackle.

He drives across and under his men, knocking them down before they get set to form interference. If he waits and tries to fight them off, he will usually be blocked out of the play. But if he takes the initiative and meets them before they are ready, he often will upset them all, leaving the ball-carrier with no protection.

Diag. 1 shows the angle of the linemen's charge. Most coaches will say, "Boy! I wish they would play me like that. I'd end-run 'em to death." Sure you would, if we had only the six linemen, but there are five more men who are a very important and integral part of this defense.

The linebackers play from three and a half to five yards back, directly behind the tackles. The halfbacks are back another two to four yards and about three yards outside our ends.

In the "turn-'em-in" style of defense, the linebacker must plug holes in the line, attempting to meet the ball-carrier as near the scrimmage line as possible. Because he does not know just where the ball





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will come he must wait to diagnose the play or else he will get sucked in too fast and fooled.

On outside-tackle plays and end runs, the strong-side half, upon perceiving that the end has done his job of stripping the interference, comes up fast to meet the ball-carrier at the line of scrimmage.

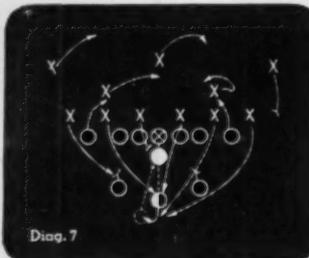
**Diag. 2** shows a typical end run and how it is handled. The defensive full (linebacker) has an inside angle on the runner should he try to cut back, and the halfback meets him head-on if he tries to come straight up the field.

If the carrier cares to run to the side, fine! The sideline is as good a twelfth man as you will ever want, and it is much easier to run a ball-carrier out of bounds than it is to tackle him.

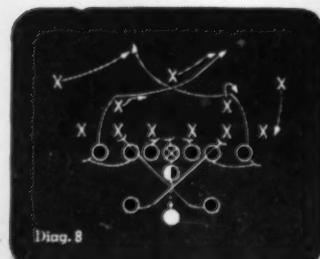
Should the end fail to strip the interference, the half must keep his feet and fight off the blockers until he can tackle the runner or until the safety and linebacker can come to his rescue.

The weak-side half drops back to become the safety whenever the latter moves down toward the play, as he must when the strong-side half is taken out or misses his tackle.

The weak-side end continues his smash by following the carrier right on around. He stops most double reverses and makes a surprising number of tackles from behind whenever the carrier tries any evasive tactics on the strong-side half and linebacker.



Diag. 7



Diag. 8

may move on toward the play. Here he may help cut off the runner and help the safety or other linebacker in case one of them was taken out of the play.

To have a successful smashing six, every boy in the line must smash to his inside and hard; so hard that he carries his opponent right into the hole with him. That stops line gains. It makes the wide territory look mighty inviting but this is where the rotating backfield takes over. They always rotate toward the play.

While the smashing six is designed primarily to stop ground gains and wide runs, a pretty good

(Concluded on page 82)

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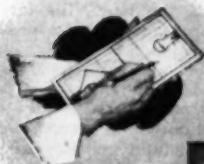
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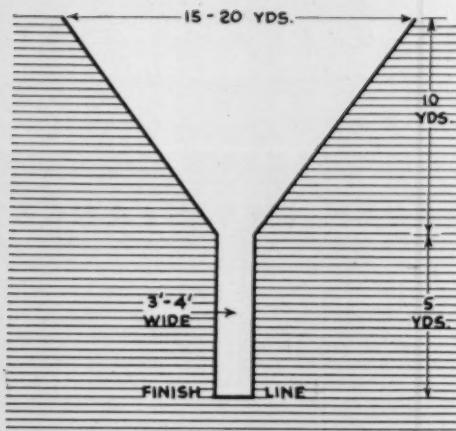
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## Organization for Cross-Country

**C**ROSS-COUNTRY running has come a long way since the day Doc Patchin, trainer at V.M.I., declared: "I don't know whether cross-country makes boys crazy or whether only crazy boys go out for cross-country."

Cross-country is a truly American sport, originating with the American Indians who competed in races from one to 15 miles for prizes ranging from a sack of flour to the pick of the squaws for a bride.

It was the Indians, too, who provided the first recognized cross-country coach. He was Chief Lightfoot, a Seneca Indian who took the name of Lewis Bennett. In 1833 he migrated to England and later became coach of cross-country at both Cambridge and Oxford Universities, where the sport was accepted with great enthusiasm.

However, it was not until over a half-century later that the sport "caught on" in American colleges and not until after World War I that it was recognized as a worthy high school sport.

One of the main reasons for this belated recognition was the misconception that running long distances was injurious to the body in general and to the heart in particular. But evidence derived from the Michigan

H.S. Cross-Country Championships, the State Physical Fitness Cross-Country Run conducted by the Pennsylvania H.S.A.A., and the High School Cross-Country Championships sponsored by New York State over a period of years proved that cross-country running, when scientifically conducted, is not injurious to the health of high school boys.

Not only has cross-country been proved non-injurious to the health, but physicians of the most prominent life insurance companies in the country have, after extensive research, stated that participation in the sport promotes the general health, stimulates the circulatory and respiratory systems, improves muscle tone, and increases the life span.

Many leading physical educators believe that cross-country, given the same break as basketball, football, or track, can prove invaluable in helping fulfill one of the chief objectives of physical education, namely, the promotion of good health in the schools.<sup>1</sup>

Nevertheless, cross-country remains the sport of the unsung hero.

By **EARL G. WATSON**

COACH, UNIVERSITY OF BUFFALO

<sup>1</sup> Proceedings of the Tenth Annual Track and Field Coaches Winter Convention, Mimeo-graph Dept., Michigan St. College, 1942. Ray Sears, "Cross-Country Running in High Schools and Colleges," p. 22.

Part of this can be attributed to the fact that most sportswriters know very little about this sport. Therefore, one of the jobs of the coach is to make the sportswriters in his area cross-country conscious. They should be kept fully informed on all activities of the team—the meets, the squad personnel, course record, interesting highlights, et al.

The school paper should also be contacted and enlightened on the sport. Remember, one of the best ways to sell anything to the parents and the community is through the student.

Another important way to stimulate interest in cross-country is to stage the meets so that the spectators can see more than the start and finish of the race. This, naturally, depends upon the layout of the course. With a little forethought, the course can be arranged so that the spectators may see the runners three, four, five, or even six times during the race and, therefore, always know how it is progressing.

It is a wise idea to lay out the high school course with the starting and finishing (and perhaps the halfway) points of the race on the regular track. This plan, of course, hinges on the availability of open fields adjacent to the track which can be used for the course. Paths 5 to 10 feet wide, if possible, should be cut through or beaten down in this part of the course.

For high school competition, there should be no steep hills, but gradual slopes. Some rough underfooting will add to the competition. If this layout plan is not possible, the course should be laid out in the town park or in an open-field-wooded area adjacent to town.

In marking the course, it is suggested that 2" x 2" poles from 4 to 5 feet high, painted alternately black and white, be placed as guide posts at least every half-mile along the route, and at all places where there could be some doubt as to the direction of running.

When these posts are placed to indicate direction, a red arrow should be set on top the post pointing in the direction of run. On the posts at each half-mile point, the cumulative mileage such as,  $\frac{1}{2}$  mile, 1 mile,  $1\frac{1}{2}$  miles, etc., should be marked.

If it is impossible to secure poles for marking the course, arrows could be marked (with lime) on the ground to indicate direction and give the distance. If possible, the school should have, in addition to the competitive course, an under-distance course and an over-distance course for training purposes. These, naturally, could be incorporated with

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variations, into the regular competitive course.

So that officiating may be facilitated, and disputes over the finish practically eliminated, a finish shoot should be set up (see diagram).

This shoot can be rapidly assembled using rope and steel poles. The poles should be from 4 to 5 feet high and the rope should be drawn taut.

As in any other sport, proper equipment is an aid to proper performance. But unlike most sports, the equipment for cross-country is very economical, consisting only of a pair of canvas-topped cross-country shoes with crepe soles and heels; two pairs of sweat socks; a supporter; a pair of track pants; a track shirt; two T-shirts; a long-sleeved T-shirt for running in cold or rainy weather; a sweat shirt; and a pair of sweat pants.

It is further suggested that each man on the squad have a pair of rather loose fitting finger gloves to wear on colder days. For the latter part of the season, these should be considered as much a part of his equipment as his sweat-suit.

Before the call for the cross-country squad is made, the coach should have completed arrangements for the physical examination of all team candidates by either the school physician or a local doctor. This examination should include a thorough check, with a stethoscope, of the heart and chest; a blood pressure examination, a check for rupture, and an examination of the feet and legs; as well as a recording of the age, height, and weight of each candidate.

No boy should be allowed to work out until this examination has been completed and he has been certified by the doctor.

Before actual training begins, it is wise to meet with all squad members and explain to them some of the significant features of this sport. Definite do's and don'ts should be stated so that the runners can get an idea of what will be expected of them, and so that they will know from the beginning that cross-country requires work.

As cross-country training is large-  
(Concluded on page 80)

**MEET RECORD SHEET, UNIV. OF BUFFALO**

Subject: Result of Dual Cross-Country Meet Between U. of Buffalo and Ontario Agricultural College at Buffalo on Wednesday, November 17th. (Meet Distance, 4.3 Miles)

To: The Athletic Director

From: The Cross-Country Coach

	School	Place	Time	Avg. Time, Mile
Kenneth Plumb	U.B.	1	23.28	5:27.5
Lloyd Schweiter	O.	2	23.55	
Lee Benice	U.B.	3	23.56	5:34
Lou Conti	U.B.	4	23.57	5:34.25
Bob Armstrong	U.B.	5	23.58	5:34.50
Ron Constan	O.	6	24.00	
Jim Decker	U.B.	7	24.02	5:35.25
Tom Bates	O.	8	24.20	
Jerry Repetski	U.B.	9	24.25	5:40.75
Frank Hilburger	U.B.	10	24.28	5:41.50
Ed Walker	O.	11	24.55	
Roger Flagg	U.B.	12	24.56	5:48
Don Thomas	O.	13	25.35	
Jim Hearn	O.	14	25.37	

**TEAM AND MEET SCORE**

University of Buffalo	Ontario Aggies		
Name	Place	Name	Place
Plumb	1	Schweiter	2
Benice	3	Constan	6
Conti	4	Bates	8
Armstrong	5	Walker	9
Decker	7	Thomas	10

20 Pts. 35 Pts.

U.B. Runners Failing to Finish: Chet Kryszczuk (Pain in side)  
Jim Brown (Injured ankle)

Ontario Aggies Failing to Finish: None.



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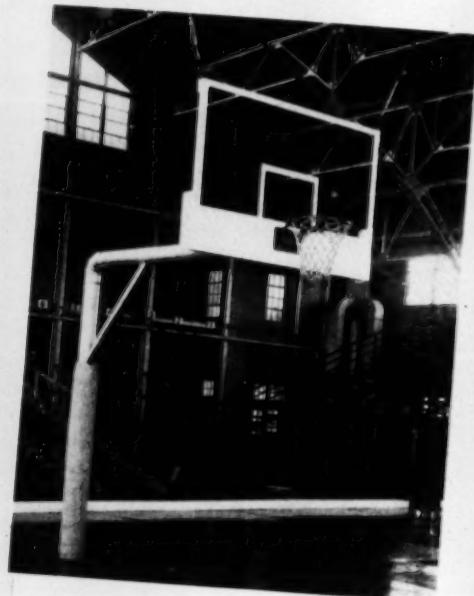
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# Resistive Shoulder Exercises

By PETE GRIFFIN

LINE COACH, FLORIDA A. & M. COLLEGE

EVER since the flying tackle and the flying block were legislated out of football, the duties of the shoulder have been increasing. Shoulder contact is now paramount in blocking and tackling, and the strengthening of normal shoulders and the treatment and rehabilitation of injured ones are giving many coaches, trainers, team doctors, and equipment manufacturers a great deal of concern.

The most serious shoulder injury in football is the dislocation of the head of the humerus from the glenoid cavity. A number of factors can contribute to this injury, such as: the nature of the game, improper equipment (mainly the shoulder pad), poor muscular development, poor neuromuscular coordination, malnutrition, and others.

At Florida A. & M., an alarming number of shoulder injuries led us to believe that all were not caused by the nature of the game, and that something should be done to decrease the incident rate.

After giving the problem considerable thought, we can now report some progress. We believe that a set of exercises that can strengthen and develop the muscles and ligaments of the shoulder girdle, can decrease the incidence of dislocations.

Many coaches believe that calisthenics and grass drills such as swinging, stretching, and twisting the limbs, neck, and trunk, help minimize injuries. We used to feel the same way about it. But when our injury incidence failed to decrease after years of serious application to daily calisthenics and grass drills, we decided to re-evaluate our conditioning program.

A studious check revealed that many of our drills not only were useless but were conducive to the kind of disablements that we were

trying to prevent or rehabilitate.

The shoulder girdle had plagued our squad up until 1947; therefore, we decided to make that joint problem no. 1. Following are some of the exercises we vaguely assumed would best condition the shoulder for football:

*Large lateral circular rotations of the arms:* The arms were kept as straight and as nearly parallel to the trunk as possible, and rotated in large, lateral circles.

*Side straddle hop:* Starting from a comfortable stance, the player, with a rhythmical movement, threw his arms sideward to an overhead position and, at the same time, extended his legs sideward. From this position, he sprang back into the starting position.

*Push-up:* Self-explanatory.

*Wind mill:* Keeping the legs comfortably spread with the back as parallel to the ground as possible, the player touched his right toe with his left hand and at the same time threw his right arm upward as high as possible—keeping the legs straight. The action was then reversed with the right hand touching the left toe and the left arm being thrown upward.

We now believe that these exercises fail to strengthen the muscles and ligaments of the shoulder in a way that will make them more able to hold the head of the humerus in the glenoid cavity. Actually, some of these exercises help stretch the ligaments and muscles, thus facilitating the separation of the head of the humerus from the glenoid cavity.

We now feel that the most successful way to strengthen a joint for contact is by resistive exercises within the tolerance of the individual and at the same time taxing to

(Concluded on page 40)

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him, but which never exceed the range of action of the prime mover muscles and ligaments of the joint.

When administering resistive exercises, it is very important to remember that the tolerance of the individual increases with sustained application and that in order to make the exercises challenging, the resistance must be increased.

It is also important not to overtax the individual. If he cannot achieve an objective after exerting maximum effort, his enthusiasm will wane.

We do not compel all our players to take these exercises. We exclude our passers, pass receivers, and defenders. We feel that these players must have freedom of movement in their arms and shoulders, and that resistive exercises tend to constrict this range of movement.

We believe that the exercises which follow and others based on similar principles, will contribute more to the development of the shoulder girdle than the common drills previously described.

**Shoulder Adduction to 90°.** Player stands comfortably with arms at side slightly away from body, and elbows flexed a few degrees. An assistant stands comfortably behind player. He stabilizes player's right scapula with right hand and places left hand slightly above player's left elbow. Subject then abducts arms to 90° without outward rotation of shoulder joint (palms down). Resistance is given above elbow joint.

**Shoulder Adduction from 90° to 0°.** After subject has raised arm horizontally to 90°, assistant places left hand underneath player's left elbow and applies resistance as subject adducts arm back to side.

**Shoulder Horizontal Adduction:** Player lies on back with arm abducted to 90°. He then raises arm to 90° through horizontal adduction, with assistant applying resistance close to elbow joint.

**Shoulder Horizontal Adduction:** After subject has horizontally adducted arm to 90°, assistant places hand in back of elbow and patient adducts arm horizontally until it reaches ground.

In all the foregoing exercises, the resistance should be within the subject's tolerance and the exercise should be repeated as many times as the player can successfully perform it. The usual range is from 8 to 15 times, after which the exercise is performed with the other arm.

**Forward and Backward Shoulder Rotation:** From standing position with feet comfortably spread, subject extends arms sideward until

they are perpendicular with body. Arms are then rotated in small circular movements, forward a while and then backward with palms up a while and then down.

**Elongated Push - Up:** Subject stands comfortably, then bends forward and places hands on ground beneath shoulders, keeping knees and arms straight. Distance between hands and toes should not be greater than three feet. Player descends by flexing arms and extending body without bending knees or moving hands or feet, until body is parallel to and a few inches above ground. Hands and toes are only parts in contact with ground.

From this position, player elevates himself by exerting force against ground with hands, straightening arms while keeping legs straight and feet in place. Ascending movement carries hips backward and upward. After arms have been straightened, subject begins descending movement again. Exercise is repeated as many times as subject can perform it, usually from four to eight complete cycles.

**Crabbing:** Player gets down on hands and toes, keeping knees off ground and back as parallel to ground as possible. From this position, he crabs forward as fast as he can for a specified distance. Usually starts at 10 yards and gradually increases distance up to 30 yards. Only hands and toes touch ground throughout exercise.

A review of the anatomy of the shoulder will bear out the fact that these exercises tax all the prime mover muscles of the shoulder girdle without stretching them.

The results have been admirable. When we first started the experiment at the beginning of the 1947 season, we had two boys with chronic shoulder dislocations and four boys whose shoulders had been dislocated at least once the previous year.

Throughout the season, only one boy suffered a shoulder dislocation, and he was one of the chronic cases. The other chronic case and the four other boys evidenced no trouble at all.

Last season, one boy dislocated his shoulder early in the season, but the accident didn't recur for the rest of the year. The chronic case that failed to respond to the exercise in 1947 didn't improve in 1948, and our team physician suggested an operation.

We intensify the exercises for the athletes who have suffered dislocated shoulders, and we always follow the advice of the team physician as to when to start the patient on the resistive exercises.

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# Your Gymnasium Plant

**I**N addition to the general construction suggestions (outlined in the February 1949 issue of *Scholastic Coach*), there are several specific safety items which should be incorporated in the construction of a gymnasium or field house.

**Space Around the Courts.** It is recommended that a distance of at least six feet be provided between walls or bleachers and the sidelines of basketball, volleyball, badminton. Where shorter distances are necessary, as is often the case in wrestling, boxing, and special exercise rooms, non-hazardous hangers or wall boards should be installed on the walls for the suspension of protective mats.

At the ends of the basketball court, at least eight feet should be allowed between the end line and the wall or basket supports. Here, again, when shorter distances are necessary, provision should be made for mat coverage. There should be an open space of at least 16 feet behind each goal, and the bleachers on both ends should be at least six feet from the end line.

The portable basketball floors used in field houses should extend farther than these recommended minimum distances, because of the step-off danger. (Some of the spaces around the courts recommended by the Committee on Physical Education Facilities of the American Association for Health, Physical Education and Recreation are not considered sufficient by the writer.)

**All doors** should be sufficiently large to permit free movement of required numbers and equipment. Upper panels should be constructed of safety glass to forewarn the persons approaching of the presence of others. When it is necessary to have doors near play areas, the handles should be recessed.

Doors should always be operative from the inside. No door should open directly into a play area, and, of course, exits must always open outward. Such doors should not open into corridor cross traffic, but should be set back so that they will not endanger passers-by. If this is not possible, it may be advisable to install baffles in the traffic lanes as a protective measure. Doors opened by photo-electric devices could be considered for use in this area.

By DON CASH SEATON

UNIVERSITY OF KENTUCKY

**Walls** should be light in color, of a non-abrasive texture, with rounded corners, and free of obstructions such as radiators, to a height of at least 10 feet. Permanent apparatus should be erected so that they will not be a hazard when not in use. Wall spaces too close to play areas and obstructions impossible to eliminate, should have non-hazardous brackets or wall boards installed from which protective mats can be suspended. Water fountains and expectorators should be countersunk and located outside of play areas.

If it is necessary to divide classes, a folding partition should be used to separate the gym floors. From the standpoint of safety, the most satisfactory method of separating groups is by means of a motor-driven, folding steel partition which prevents the students between the two areas from bumping into one another.

Nets serve to segregate the groups and keep balls from flying into the wrong areas, but have not proved satisfactory for general class division because they do not keep out sound or sight. Many physical educators feel that canvas partitions cause more injuries than they prevent, because players often collide when they are unable to see each other.

Canvas and net partitions are probably most useful in field houses when used to segregate such activities as

golf and baseball practice, which are particularly dangerous indoors when not confined to their respective areas.

Windows in play areas should be of shatterproof glass and/or covered with protective screens.

**Acoustical Treatment.** Acoustics undoubtedly have a great deal to do with safety in indoor play. Reverberations add to confusion, and confusion contributes to the hazards of recreation. It is therefore recommended that indoor play areas, especially the gym and swimming pool, be properly treated for soundproofing.

**Floors.** The most important safety consideration in the selection of the gym flooring is that it provide a resilient nonslip surface. Since slipping is one of the major causes of accidents in the gym, every precaution must be taken to eliminate this hazard.

At present, the hard maple floor is the most popular. Regardless of the type of wood used, the so-called bakelite finish has proved the safest and most satisfactory. Some schools have found linoleum, cork, and other composition floors very satisfactory, especially for recreation rooms. They are usually softer but lack the gripping power of the bakelite finish. These materials are less likely to cause blistered feet and abrasions than hardwood floors.

Before installation, wood floors should be treated with a fire-resistant material, especially those above the first floor and those not laid over concrete. Boxing and wrestling area floors should be completely padded and covered with canvas.

**Stairs and Ramps.** Ramps of moderate slope should be provided instead of steps wherever possible. It is readily recognized that ramps insure a much safer footing for ascending or descending. This is particularly true of places designed to handle large crowds in a limited time, such as stadiums and basketball gyms. The ramps should not exceed a one-foot fall in ten feet, and the surfaces of stairs, ramps, and platforms should be of nonslip material.

According to John E. Marshall, Supervisor of School House Planning for the State of West Virginia: "Adequate stairway calls for two stairways, at least 48 inches wide, for every building two stories or more in height, with 24 inches of clear width for each

**T**HIS is the second of two articles on the construction of athletic facilities, by Don Cash Seaton, physical education chief and track coach at the U. of Kentucky. The two articles make up Chapter VIII of Mr. Seaton's splendid new text, "Safety in Sports" (\$4.50), and are reprinted by permission of the publishers, Prentice-Hall, Inc. (Copyright 1949 by Prentice-Hall, Inc.) For a complete review of the book, refer to page 66 of the January 1949 *Scholastic Coach*.



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60 persons on any floor above the first. 'Clear width' is measured between handrails, which are provided on each side of the stairs. An intermediate handrail is provided where stairs exceed 72 inches in width."

Stairs or ramps from permanent bleachers should not lead directly to the playing floor or swimming pool. If necessary to have them, they should be recessed and placed outside the playing area. Those leading to the athletic field should have at least a one-quarter turn to prevent players from rushing in and out of the building.

Stairs should have at least 10 foot-candles of light at all times. Where necessary, treadmill lights should be installed and the outside entrances to the buildings should have sunken areas for foot mats or grills. Raised mats or grills cause tripping and falls.

#### BLEACHERS

Safety must be a primary consideration in the selection of bleachers. Permanent steel and concrete bleachers are usually the safest, and the wooden knockdown type the most hazardous.

The folding steel bleachers have become extremely popular for indoor use and have proved quite satisfactory from the safety standpoint. The architect should provide space for them to be folded into the wall to eliminate the hazards of an uneven surface.

Permanent bleachers should be constructed so that they will not allow a person to slip down through them, which is a type of accident that occurs occasionally when either knockdown or folding bleachers are used. Some of the folding types are constructed to minimize this danger and should be selected for this reason.

It is recommended that guard rails be installed at the ends of all bleachers which do not finish against a wall. The American Standards Association requires these rails to be placed at the rear and ends of seats higher than four feet from the ground. Manufacturers of demountable bleachers and builders of permanent grandstands should be engaged to inspect their product periodically for safety.

Regardless of the type selected, bleachers should be constructed so that they will bear a vertical live load of at least 125 pounds per lineal foot of seats and floor boards, and at least 24 pounds sway load per lineal foot. They should also be designed to resist, without live load, a horizontal wind load of 30 pounds per square foot of all surfaces in the vertical projection of the stand, and with full live load, one half of the above wind load.

Demountable bleachers higher than 15 feet and permanent grandstands greater than 20 feet should be constructed of steel, concrete or materials of equal strength. Wood should be used only for seats in stands of these heights.

#### OTHER EXERCISE ROOMS

Other exercise rooms such as the apparatus, corrective, or adapted gymnasium and recreation room, should conform to the general suggestions mentioned. In addition they should include special construction features for each activity to be housed.

Squash and handball courts must be absolutely free of obstructions; wrestling and boxing rooms should have completely padded floors and walls, to a height of six feet; and recreation rooms should be arranged for the segregation of ping-pong tables, golf-driving net, shuffleboards, and other games.

In addition to germicidal lighting and radiant floor heating for certain rooms, air-conditioning should be considered for wrestling and boxing rooms, as well as for dressing rooms in warm climates.

#### STORAGE SPACE

Because apparatus, equipment, folding chairs, knockdown bleachers, and other items may be hazardous when left in recreation areas, sufficient space should be provided for their safe storage.

The sizes of such rooms should not be determined by the amount of leftover space, but should be based upon need. The National Council on Schoolhouse Construction recommends a minimum of 200 square feet. The architect must be apprised of the amount of equipment to be stored.

Storage space must be accessible, well-lighted and ventilated, must have wide double doors, and, if possible, include an automatic sprinkling system. In addition, each gym should be equipped with a built-in storage cabinet in which supplies used daily, such as volleyballs, nets, basketballs, and bats, may be kept.

Where a piano is to be used, it is desirable to provide a built-in storage space in the wall of the gym or special exercise room. This provision allows for its convenient use as well as for safe storage.

#### SERVICE ROOMS

**Dressing Rooms.** Probably the most important safety item in the construction of the dressing, showering, and drying rooms is the provision of nonslip flooring. No entirely satisfactory material has been developed, but the safest is generally believed to be tile or terra cotta. If cement is used, it should have a pulverized steel or carborundum finish or be painted with marine nonslip paint.

The room must be large enough to accommodate the peak load safely, allowing approximately four square feet of space per user. Lockers should be spaced with a minimum of six feet between rows to permit free and safe movement of users. It is recommended that stationary benches be installed to prevent the hazards of

(Concluded on page 65)

Reg. U. S.  
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LOOK FOR  
THE RED BALL  
ON THE SOLE

## BALL-BAND Wins on every Test



**Thrust Test**—One of many laboratory and game tests used in perfecting BALL-BAND Basketball shoes.

Correct shoes can give your team the added margin of speed that wins games. BALL-BAND Basketball shoes are *specialized* shoes. Every feature from the cut of the upper to the design of the sole has a basketball reason—and every feature has met the test of winning game play. In a recent survey coaches in 40 states listed features important in basketball shoes—BALL-BAND shoes have all these features—and more—see list below.

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- Correctly designed triple arch cushion. (Arch-Gard).
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- Light weight with maximum wearability.
- Clean-cut, full traction soles for sure footing at top speeds.
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- Pivot block reinforcement under big toe joint for extra wear.
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- Correctly shaped and attached lace stays that do not pinch toes.
- Porous upper for coolness.



**NOTE:** You decide! Go to the store that displays the Red Ball trade-mark and examine BALL-BAND Basketball shoes. Look for every important feature. Write BALL-BAND for an interesting basketball shoe booklet.

## BALL-BAND

MISHAWAKA RUBBER & WOOLEN MFG. COMPANY • MISHAWAKA, INDIANA

# Three-Men-Under OFFENSE

**A**T Ganado High School we like to win, and when we do not win we do something about it. That's why we did not stand still when we discovered that our short punt and our weaker T, while doing fine in midfield, was being stopped consistently inside the 10-yard line.

It was obvious that we needed a scoring punch of some sort, and we set to work devising one. The ultimate answer was a new three-man-under offense. Has it worked? Beau-

tifully! In every game that we have alternated this offense with our punt formation, we have scored more than 25 points. What's more, we have not been stopped on downs within the 10-yard line.

The first requirement of this formation is a tall center, who can, by putting one hand on the ground within one foot of the ball and reaching far enough forward with the centering hand, make sure that the three under backs are at least

By TOM TALLEY  
and JAMES LITTLE

**GANADO (TEX.) HIGH SCHOOL**

one yard back of the scrimmage line.

We have a 6-3 center who can reach forward a yard and a half and yet center the ball with one hand, as in the T.

The punt-formation tailback (#3) comes up and takes the position of a T quarterback, except that he spreads his legs wide and keeps his rump high.

The fullback (#2) places his right foot diagonally towards the line of scrimmage and directly back of and touching the center's right foot. He reaches under with his hands high up on the center's right thigh.

The left halfback assumes the same position on the opposite side of the center with his left foot behind the center's left foot and his hands under and high up on the pivot's left thigh.

In this way, three men are deployed under the center in position to receive the ball directly from him, as in the T, and yet are a yard and a half back.

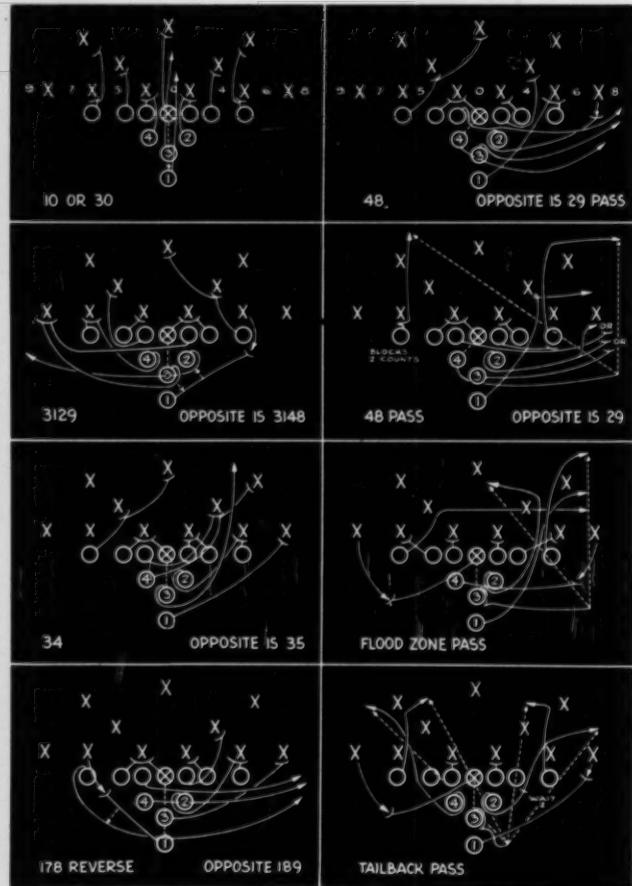
The blocking back (#1) crouches behind the tailback and, by looking between his legs, is in position to receive the ball from the center on a snap-back or from the tailback on a spinner.

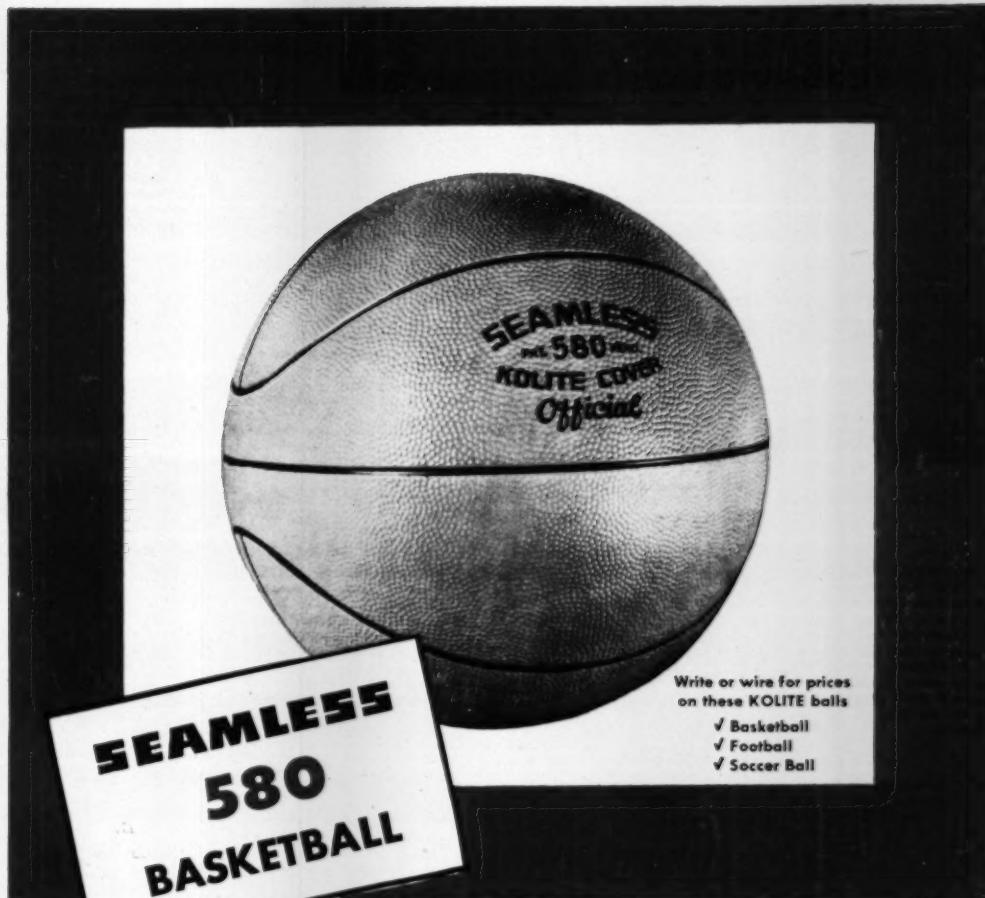
All of the backs can spin and hand off the ball to each other, depending on the play. Although any number of interesting play patterns can be worked out, we use only the plays given in the diagrams plus their opposites. As you may see, we have numbered the plays, the backs, and the holes.

Our numbering system is quite simple. The first digit signifies the back to which the ball will be passed; the middle digits denote the backs handling the ball; and the last number refers to the defensive hole through which the play will go.

Thus, Play 34 means that the ball is passed to the #3 man who goes through the 4 hole between the defensive tackle and the guard on the opposing team; while Play 3129 means that the ball goes to #3, who hands to #1, who hands to #2, who goes around left end.

In the diagrams, the #3 back has been moved back for the sake of clarity. In actual practice, he is right under the center with the #2 and #4 backs.





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Kolite stands up in all kinds of weather—hot or cold, dry or wet . . . will not peel or crack . . . is not affected by oil or grease . . . maintains "new ball" shape and feel for years.

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\*Patent pending.

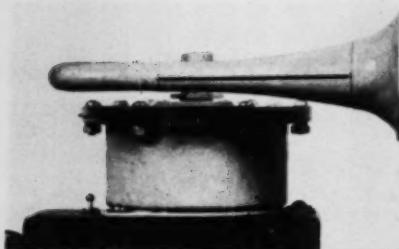
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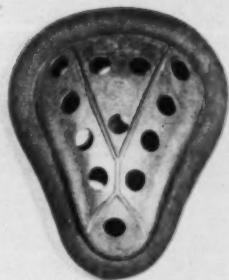
# NEW EQUIPMENT

As a service to its readers, Scholastic Coach offers this periodic round-up of new sports equipment items. For further information write to: Scholastic Coach, New Equipment Dept., 7 East 12 St., New York 3, N. Y.

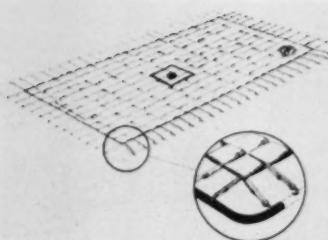


• **110 VOLT HORN.** This Cedar Kraft Co. horn is ideal for stopping ball games for substitutions or other reasons. Eliminates use of gun and is really loud, so it can be heard above the din of the crowd. Shipping weight is approximately 10 lbs.

• **MAGNESIUM CUP.** This new Bike Web Company product is molded from light, strong magnesium and, although comfortably lightweight, provides the greatest possible vital protection in all strenuous athletics and contact sports. The cup can be used with the #48 rubber cushion or the #53 or #54 Cup Supporter.



• **CHEERLEADERS' MITTS.** Made to order by Butwin Sportswear Co., Cheery Mitts come in school colors with school name embroidered on back. Palms are made of 24-oz. wool, backs of lustrous tackle twill, and lining of knitted wool. Elastic tightener at wrists. Different styles for boys and girls.



• **YARDAGE MARKERS.** Made of durable black rubber with washable white fabric numerals molded into face, this new Voit Rubber Corp. item is 100% safe. No metal or sharp corners, will bend or collapse under weight. Requires no upkeep, is easily assembled and dis-assembled.



• **TRAMPOLINE BED.** Designed by Larry Griswold, this bed is made of durable shoe machine belting, woven and air-spaced to give better performance. Will always remain uniformly lively, and will last years longer than conventional beds.

• **KEY-CONTROLLED LOCK.** A Master Lock Co. device, this key-controlled combination padlock features genuine brass-cylinder, nickel-silver pin tumbler key security. Free-turning dial is of brass, finished in black enamel with white numerals.



• **SOUVENIR ITEMS.** Perfect for decorations or athletic banquet awards, these Jest-Art statuettes are colorfully painted and feature smart fuzzy sweaters adorned with your school colors and school, fraternity, or sorority letters. Hand painted.



• **DOWN INDICATOR.** Produced by Noonan Advertising Service, this flip-over Indicator stands 6' high so that spectators can see down regardless of confusion in stands or on field. When down changes, operator simply flips over a metal card and correct down shows on both sides of Indicator.

## HORN FOLDING PARTITIONS

## AND BLEACHERS

**THREE GYMS IN ONE!** For large or small, new or old gymnasiums, the HORN FOLDING BLEACHERS and HORN FOLDING PARTITIONS will utilize every inch of valuable gym space! A Horn installation is "tailored" to meet your requirements.

**A WORD ABOUT HORN FOLDING BLEACHERS.** Horn Bleachers are engineered to provide roomy seating comfort, smooth and dependable operation, and permits the use of "all working space".

### CHECK YOUR SPACE REQUIREMENTS

ROWS	FLOOR SPACE		**HEIGHT
	IN USE	*CLOSED	
3	4 Ft. 9 In.	1 Ft. 8 $\frac{1}{2}$ In.	3 Ft. 0 In.
4	6 Ft. 7 In.	2 Ft. 0 $\frac{1}{2}$ In.	3 Ft. 9 In.
5	8 Ft. 5 In.	2 Ft. 3 $\frac{1}{2}$ In.	4 Ft. 6 In.
6	10 Ft. 3 In.	2 Ft. 6 $\frac{1}{2}$ In.	5 Ft. 3 In.
7	12 Ft. 1 In.	2 Ft. 10 $\frac{1}{4}$ In.	6 Ft. 0 In.
8	13 Ft. 11 In.	3 Ft. 15 $\frac{1}{2}$ In.	6 Ft. 9 In.
9	15 Ft. 9 In.	3 Ft. 5 In.	7 Ft. 6 In.
10	17 Ft. 7 In.	3 Ft. 8 $\frac{1}{2}$ In.	8 Ft. 3 In.
11	19 Ft. 5 In.	3 Ft. 10 In.	9 Ft. 0 In.
12	21 Ft. 3 In.	4 Ft. 3 $\frac{1}{2}$ In.	9 Ft. 9 In.
13	23 Ft. 1 In.	4 Ft. 6 $\frac{1}{2}$ In.	10 Ft. 6 In.
14	24 Ft. 11 In.	4 Ft. 9 $\frac{1}{2}$ In.	11 Ft. 3 In.
15	26 Ft. 9 In.	5 Ft. 11 $\frac{1}{4}$ In.	12 Ft. 0 In.
16	28 Ft. 7 In.	5 Ft. 4 $\frac{1}{2}$ In.	12 Ft. 9 In.
17	30 Ft. 5 In.	5 Ft. 8 In.	13 Ft. 6 In.
18	32 Ft. 3 In.	5 Ft. 11 $\frac{3}{4}$ In.	14 Ft. 3 In.
19	34 Ft. 1 In.	6 Ft. 2 $\frac{1}{2}$ In.	15 Ft. 0 In.
20	35 Ft. 11 In.	6 Ft. 6 $\frac{1}{2}$ In.	15 Ft. 9 In.

\*Dimension includes 4 $\frac{1}{2}$  in. space between top seat and wall.

\*\*Height in open position same as closed. For Bleachers higher than 20 Rows write for complete details and dimensions.

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FORT DODGE, IOWA  
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**I**NTRAMURAL athletics bring in no money at the gate. No credit for participating is given, and as a rule the crowds that attend the games are infinitesimal. What then is their purpose?

The only answer lies in the game itself. There is no doubt that one of the main purposes is recreation. Yet the thrill of competition, the spirit of team play, and the satisfaction received from the muscular effort needed to win a game, all make it worthwhile, whatever the reward.

Voltmer and Esslinger said, "The purpose then, of intramural sports is to supplement the curricular activities of physical education in order that the objectives of physical

# Complete

education may be more completely realized."

For these objectives to be more "completely realized," we must provide:

1. Athletics for everyone, including games of a rugged nature.

2. Recreational games for everyone, including members of the varsity teams.

3. A place where boys will have a chance to do well, if not excel, in some activity and win the approval of the group.

4. A proving ground for boys to test out the fundamentals taught in physical education classes.

5. An opportunity for everyone to participate in games of their own choice; this choice should include both team games of more or less rugged nature and sports with carry-over value.

To be more specific, every boy should have a chance to play a game like basketball in competition. But the varsity basketball player will enjoy playing a game of badminton or volleyball, too, and perhaps a change during the season will help not only his physical and mental self, but his basketball game as well.

Intramurals should not be a farm system for varsity athletics. But there is no harm in a player jumping from intramurals to the varsity team. According to Voltmer and Esslinger, "there can be no objection, if out of the intramural activities varsity material is developed.

provided this is incidental."

In fact it will enhance your intramural program if the boys know that they might have a chance to move up to the varsity. The varsity program may, in turn, be helped if the boys know they have a chance to play in recreational games, either in their off season, during the season, or in a vacation period.

Let me list first, in order of importance, the people that must be sold: (1) The school administration, (2) the faculty members, and (3) the public.

The school administration is your first job. Most principals and superintendents are in sympathy with intramural programs. But they must be willing to outline a program, with your help, for the board of education.

room teachers tell me that the intramural program was the making of their homeroom. To be specific, the teacher of homeroom 236 in our school told me the following story.

Her homeroom had been a disorganized group for two years, as sophomores and juniors. In their senior year, we expanded the program. She said, "not only did they pick up interest and win the senior grand championship in intramurals, but they entered into other activities such as Red Cross and Christmas basket drives with a lot more homeroom spirit and enthusiasm."

Getting the faculty members on your side is a real boost for the program. And they can be won easily when they see that their job will be made easier and that every boy will be reached in the program.

may be one of the jobs for your intramural trainer.

In our school we do not excuse the physically handicapped from coming to physical education classes. They are given corrective work, where possible, and classwork from books. One of these boys serves as an intramural trainer. During his physical education class period, he devotes part of his time toward keeping statistics and records that make the program of greater interest to the whole school.

Intramural results should form an important part of your school paper. This will give a greater number of kids a chance to read about their friends and themselves. Parents will enjoy reading about their children. On your intramural bulletin board, you can keep an up-to-date chart or graph showing the point to-

# Intramural Program

They must be willing to provide three essentials to the success of your program, namely, space, time, and staff.

It takes a lot of planning to work something new into a busy gym schedule. Then, too, the cooperation of your principal is important in such matters as evenly dividing homerooms. From an educational standpoint, it would seem better to divide the homerooms evenly, both in numbers and in sex. But from the standpoint of good competition in intramurals, it is almost imperative that your homerooms have nearly an even number of boys.

Don't try to buck the interscholastic program. There is a need and place for both and each one can supplement and create interest in the other to the mutual benefit of both. According to Voltmer and Esslinger, "the greatest good of the greatest number should be the athletic ideal, and it can only be realized by a comprehensive, integrated physical education program, including the required, intramural, and interschool activities."

After you have the administration sold, your next job is the faculty. You need the faculty and especially the homeroom teachers to help administer the program. Whatever your unit of competition is, you will need the help of some faculty member from each group to keep things going.

Homeroom captains are important and should be able to do the work of organizing teams, notifying players, posting schedules, etc., but an interested faculty member can do a lot to increase team spirit and morale.

It works both ways. The intramural program can do much to weld the disinterested homeroom into a working unit. I have had several home-

Your next step in selling the program is the public. This is a continuous job and can be done through several channels. First you must present your program. You can do this through school papers, local papers, radio stations, homerooms, classrooms, assemblies, physical education classes, and bulletin boards.

The kids are probably the best salesmen you have. By having homeroom or class elections for a representative to the intramural council, you can publicize the program. Then in your intramural meetings, let the kids help you plan the program.

Although you must have a list of proposed activities and the general plans for competition worked out yourself, let the intramural council make the decisions. They will help the program with ideas and suggestions that you may not have thought of. All of it is governed, of course, by your time, space, and facilities; and the intramural council is a good place to work out the problems.

The representatives can carry the news back to their class or homeroom. It is a good idea to summarize the decisions and ditto them so each representative can have a concrete list to work with when he passes on the news to his teammates. Rules, regulations, schedules, pairings, etc., should be posted on the various bulletin boards. This will help you publicize and administer the program.

Everyone likes to have a certain amount of recognition. To get the most publicity into the papers, you have to furnish them with accurate, interesting, and up-to-date facts. This means that you will have to have a statistician to keep individual, team, and class or homeroom results. This

By RAY SMALLING

SENIOR HIGH SCHOOL, AMES, IOWA

tals of each homeroom toward the championship.

We keep one chart showing the points won in each sport by each homeroom, and also keep a graph showing the total points earned by each homeroom in comparison with other homerooms. Pictures of all activities will help, too; these may either be run in the paper or posted on your bulletin boards.

There is nothing that will kill your program quicker than poor organization. On the other hand, good organization will stimulate and increase the interest. If all contestants know the date, the place, and the starting time of each event, there should be no reason for not starting on time. If they know also that games and matches will start as scheduled, they will make more of an effort to be there and fewer forfeits will have to be declared.

As mentioned before, it is very important to have the cooperation of the principal. He, as the administrator, will have to arrange for such important details as time allotted to intramurals, space available for activities, and the dividing of homerooms for competition.

This division will have to be made at the beginning of the school year. If you know what time and space is available, you can go ahead and organize your program. When the kids see that you have something to offer them and are willing to work for them, they will pitch in and help out, too.

Following are some suggestions on organization:

## Units for competition

1. The homeroom—most logical unit if it is available.
2. Interclass.
3. Age, height, and weight—age alone is probably the best.

(Continued on page 53)

ALWAYS ON TOP OF THE PLAY!  
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WEBSTER CITY, IOWA

(Continued from page 51)

4. Township or geographical divisions for farm areas.
5. Residential districts.
6. Physical education classes.
7. Arbitrary groups—homogeneous groups which can develop a team spirit make the best competitive units.

#### Time for activities

1. After school—best time if it can be arranged.
2. Noon hour—shouldn't have too strenuous games directly before or after lunch. The period is good for less strenuous games.
3. Before school.
4. Saturdays—more gymnasiums should be opened on Saturdays.
5. Vacation periods—especially good for skating, ice hockey, tobogganing, skiing, or hunting parties (rabbit, crow or fox hunts).
6. As arranged—some matches such as ping-pong or golf can be arranged between the contestants.

#### Personnel

**Director**—should have intramural athletics as his main job. He may teach physical education or other classes, but his main interest should be intramurals. (This may not be true in the small school where only the coach is available—here is a chance for the coach to build his reputation on something else besides winning teams.)

**Assistant director**—can be some teacher who has an interest in intramurals. The principal should list this job on the faculty extra-curricular assignment sheet so that the teacher may receive credit and recognition for doing an extra job.

**Intramural managers**—the number, of course, depends upon the size of your school and program. But it is advisable to have more for your lower classes, so that by the time they are seniors you can pick out the best boy to be your senior manager.

Your managers can be invaluable to you and your program. Give each manager a set of instructions outlining his duties and responsibilities. Then give them responsibility and some authority and they will do a good job. Managers can perform such important duties as running off matches and tournaments, timing, scoring, officiating, checking towels, caring for equipment, posting notices on bulletin boards and keeping charts and graphs up-to-date, making announcements at assemblies and over the school sound system, and keeping the records and statistics.

#### Unit captains

Each unit should elect a captain. Your homeroom captain can do much to help you administer the program. He should be responsible for organizing his team, representing his home room on the intramural council, and other duties such as helping to secure officials.

#### Faculty members

Homeroom teachers should be kept

informed through copies of schedules and instruction sheets. They will show more interest, too, if you go out of your way to keep them posted on results.

#### Intramural council

Consists of unit captains, intramural managers, and the directors. Everyone should be welcome to attend the meetings, but allow only one vote for each unit. The council can decide about such matters as activities to be held, schedules, eligibility, officials, protests and awards. Awards should include those to participants and to managers.

#### Scoring of points

As nearly as possible, all activities should be scored alike. In our school we award points of 10-6-2 in all activities. In cases where the sport is held both in the fall and in the spring, we divide the points to 5-3-1. Some division may be necessary for team and individual sports. You will find that winning points for the homeroom toward a grand championship is a good motivator both for individuals and for teams.

#### Championships

Individuals, team and grand championships—this scope of championships will satisfy the individual performers and the team performers. But even the individual champion can feel he is a part of the group by winning points for his homeroom toward a grand championship.

William says "By definition, competition is an act of seeking what another is endeavoring to gain at the same time, and cooperation is an act of working jointly with others to a common end." Championships should meet the needs of individuals and groups in motivating good competition, yet at the same time they can be the rewards of cooperation among the team members.

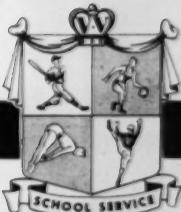
#### Awards

Here again we should have individual, team, and championship awards. Voltmer and Esslinger said, "the use of awards as incentives to intramural participation can be defended as long as they remain inexpensive." A ribbon awarded at an assembly is just a symbol of achievement. But it is the means for providing recognition in front of a group and that is accomplishing one of our objectives, namely, obtaining approval of the group.

#### Officiating

According to the Iowa Program of Physical Education for Boys, "Officiating must be good if the desired educational outcomes inherent in competition are to be realized. However, student officiating can fulfill the purpose if the proper supervision is given to it. In the use of students for this purpose another field to experience is opened up to them."

We have been quite successful in our school using students as officials. Several varsity members have helped



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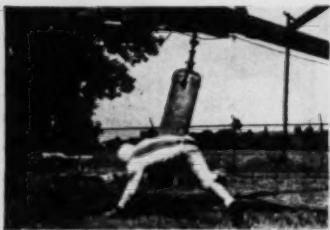
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• **Mechanism can be set so fine that a mere slap of the hand can release the dummy, or it can be regulated so that a player must hit it full speed with shoulder to take it down.**

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2. Player works on solid ground instead of in sawdust pit—moving bag thus helps develop timing and precision under actual playing conditions.

3. Time can be saved by having forward passers throw at moving dummy, releasing ends for other duties.

4. Dummy can simulate action of a defensive man against offensive maneuver; blockers can be sent out to meet it on fly and knock it down.

5. Dummy is a tough guy who never gets hurt—saves punishment that must ordinarily be absorbed by live targets.

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out. This gives them another experience in athletics and helps the interest in intramural athletics as well.

Following is a summary of possibilities for securing officials: Coaches, faculty members, young officials who want to gain experience, interested townspeople, varsity members, young alumni, lettermen's club members, intramural managers, practice teachers, ineligible athletes, students, have each team responsible for one official.

#### Physical examinations

It is very important that all participants have a physical examination. As a rule, intramural athletes have less equipment and medical care than varsity athletes. This is all the more reason for having a good physical examination.

One of the best ways to take care of this is to examine everyone through your required physical education classes. If this is not done the director should see that some other arrangement is made, both for the boys' protection and for his own.

Brammel says, "The school administrators and boards of education will probably realize more actual benefits to pupils per dollar invested in a well-planned and well-directed intramural program of sports than in almost any other activity in which pupils participate."

It is fortunate that intramurals are not expensive. The facilities and equipment in most schools is adequate to carry on a good program. With a small expenditure for additional equipment, awards, etc., a very fine program can be carried out.

The question is, who is going to pay for it? Some authorities feel that the board of education should stand the expense since intramurals are an important part of the school program. And by virtue of the use of facilities, equipment, and staff, the boards do stand a large part of the expense.

But if the program needs help, I see no harm in the varsity athletic department budgeting some money each year for intramurals. Any increase in athletic interest will probably benefit the athletic budget. Then too the

charge of commercialism against interscholastic athletics can better be answered by pointing out the fact that the varsity program helps finance the intramural program.

I'll repeat here, there is a need for both varsity and intramural athletics in the whole program along with your required physical education and corrective program. There is no need for either intramural or varsity athletics to try to buck the other. Both can exist to the mutual benefit of each.

In the recent Iowa legislative assemblies, much time was devoted to a discussion of the proper use of school facilities and the expenditure of state money. Some criticism was leveled at the large amount of time we leave our school facilities idle during the year.

This charge can undoubtedly be made in other states also. Boards of education, principals, and coaches can do well to expend a little thought towards using the empty gymnasiums during Saturdays and vacation periods. This may be one way of taking a shot at our juvenile delinquency problem.

Despite our good intentions, we still may need to find a way to finance the program. Here are a few suggestions:

1. Board of education.
2. Interscholastic athletics.
3. Concessions run by intramural students at varsity contests.
4. Sports shows or carnivals.
5. Physical education demonstrations.
6. School pencil, pennant, or souvenir sales.

7. Selling tickets for varsity games (both gate and advance sales).

8. Entry fees for competing groups.

9. Student entry fees. Note: Some provision should be made for those not able to pay—the program should be open to everyone. However, the student can expect to furnish his own personal equipment.

No one program can fit the situation in all schools. Each school has its own particular problems that have to be met individually. We offer here a suggested program for three different

#### ACTIVITY SYLLABUS FOR SMALL TOWN SCHOOL

Fall	Winter	Spring
Pass & touch football	Basketball	Baseball
Tug-O-War	Volleyball	Softball
Cross-country	Wrestling	Track:
Tennis	Bob-sled races	50 yd. dash
Horseshoes	Skating	Shuttle relays
Baseball	Skiing	Shot
Croquet	Badminton	80 rod or 880 yd. run
Shuffleboard	Ping-pong	Broad jump (standing or running)
Aerial tennis dart	Free throwing	Football or baseball throw
Archery	Shuffleboard	Tennis
Squirrel hunting	Checkers	Box hockey
Pheasant hunting	Chess	Horseshoes
Duck hunting	Box hockey	Tug-O-War
Cow shoots	Rabbit hunting	Archery
Striped gopher & Grey gopher contest	Fox hunting	Trapping pocket gophers
		Croquet
		County field days

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## ACTIVITIES FOR THE MEDIUM-SIZED SCHOOL

Fall	Winter	Spring
Pass & touch football	Basketball	Baseball
Tug-O-War	Badminton	Softball
Tennis	Wrestling	Golf
Golf	Swimming	Golf putting
Soccer	Volleyball	Track (establish events & keep records from year to year)
Horseshoes	Bowling	Horseshoes
Hunting contests	Free throwing	Swimming
Shuffleboard	Table tennis	Tennis
Box hockey	Skating	Tetherball
Cross-country	Skiing	Box hockey
Football field meet	Shuffleboard	Archery
Archery	Checkers	Croquet
Rogue	Chess	Aerial tennis dart
Croquet	Aerial tennis dart	Hunting
Tetherball		

sized high schools.

It may be that some activity listed under another sized school would fit your situation. We have suggested more activities than could be worked into the normal high school in order that the syllabus be flexible enough to be of use.

### The consolidated or small town school

The boy who attends a consolidated or small town school is just as much entitled to a varied sports program as the boy who goes to a large city high school. It is true that he may have to leave on the bus right after school, and he may not be able to have competition in such activities as golf or swimming. At the same time, he has opportunities the city boy does not have.

In the first place he will have a better opportunity to play on a variety team and may not need as many intramural sports. Yet he will still want to learn and play some of the sports that only intramurals can offer him. With a little imagination, you can plan activities that will fit your

situation no matter what the size or location of your school.

Here is a suggested syllabus which includes strenuous and non-strenuous games for the morning period, the noon hour, the after-school period, Saturdays, and vacations. It purposefully includes more activities than could possibly be held. This is done with the hope that it will suggest activities to the coach or director who is building a program. (See page 54.)

### High Schools above 400 enrollment

For the large school program, we suggest the following activities depending upon your facilities, staff, and time. As suggested before, they may be adapted to strenuous and non-strenuous play periods as well as vacation periods. (See top of page.)

Squirrel, duck, pheasant, and rabbit hunting were tried in the Ames High School with fairly good success. Certificates signed by parents and a hunting companion were turned in as evidence of game shot. The only criticism was from the county conservation commission who thought

## SYLLABUS FOR THE LARGER-SIZED SCHOOL

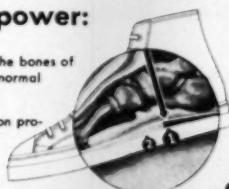
Fall	Winter	Spring
Pass & touch football	Basketball	Baseball
Tug-O-War	Badminton	Softball
Tennis	Wrestling	Golf
Golf & Golf putting	Swimming	Golf putting
Soccer	Volleyball	Track—Note: We use 6 events in each class—50 yd. dash, 60 yd. lows with 5 hurdles, 440 relay, running broad jump, high jump and 12# shotput.
Speedball	Bowling	Horseshoes
Horseshoes	Free throwing	Tennis
Volleyball	Handball	Roque
Rifle clubs	Table tennis	Swimming
Shuffleboard	Skating	Volleyball
Box hockey	Ice hockey	Tetherball
Football field meet	Skiing	Shuffleboard
Archery	Indoor track	Archery
Rogue	Water polo	Croquet
Croquet	Water basketball	Box hockey
Swimming	Fencing	Aerial tennis dart
Controlled flight model air plane contests	Gymnastics	Controlled flight model airplane contests
Tetherball	Diving	
Bowling	Shuffleboard	
	Checkers & chess	
	Rifle clubs	

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killing game as a contest might deplete the supply.

I would suggest that a close count of available game be made with the conservation commission before holding such a contest. There should be no criticism of fox or crow hunts. Gophers may be either drowned out or shot. Rabbit hunting makes a good Christmas vacation activity.

### High schools with enrollments from 150 to 400

In schools of this size, you find that a very heavy interscholastic program keeps the boys busy at least one season out of the year with a varsity sport. Yet there are still a lot of boys who need and don't get sports competition. Then, too, the varsity boys need and enjoy other games of recreational nature.

As in the smaller schools, we offer here a program with more activities than can be held in one year. They should meet the needs of morning noon-hour, afterschool, Saturday or vacation periods. (See page 56.)

### REFERENCES

Voltmer, E. F. & Esslinger, A. A., *The Organization & Administration of Physical Education*, Appleton-Century-Crofts, Inc., 1938, New York.

Williams, J. F., *Principles of Physical Education*, W. B. Saunders Company, Philadelphia, 1946.

Brammell, R. P., *Intramural and Interscholastic Athletics*, U. S. Department of Interior, Bulletin, 1932, No. 17, Monograph 27.

*The Iowa Program of Physical Education for Boys, Secondary Schools*, 1945, The State of Iowa, Des Moines.

*The Sports Program*, issued by the Aviation Training Division, Office of the Chief of Naval Operations, U. S. Navy, 1943, Annapolis.

Bowen, W. P., and Mitchell, E. D., *The Theory of Organized Play*, A. S. Barnes and Company, New York, 1928.

### Booting ABC's

(Continued from page 22)

powerful kick, be an accurate passer, good dribbler, and have ability to head well.

The wings should have speed, be good dribblers, have strength to cross ball from wing, and have ability to head well.

The insides should be good dribblers, hard shots, excellent ball-controllers, good passers and good headers.

The center forward should be fast, a good shot, have ability to position himself and set up the ball for his other linemen, and be able to head ball well.

### COMBINATION PLAY

There are many combinations, both on offense and defense, such as: Offense—wing and inside switching, center and inside switching, triangle play (wing, inside, and halfback). Defense—goalie and fullbacks, half-back and fullback switching, half-

back and inside switching.

The various combinations call for many hours of practice, testing under game pressure, and constant talking to each other by the players involved.

#### OFFENSIVE PLAY

The most difficult phase of soccer naturally is scoring. In shooting at the goal, the coach should insist first on accuracy, then on power. Many goals are missed in close because the shooter feels he must knock out the back of the net. A controlled shot is far more accurate than an overly vicious attempt.

Remember, too, that a team cannot score unless they take shots, and that the leading scorers are the boys who learn to get their shots off in a hurry. A player seldom gets the time to set the ball up real pretty.

Getting into the proper position for passes is part of the secret to scoring. The player who passes to a teammate, then stands there admiring his pass, is losing a golden opportunity to quickly move to a spot for a return pass. Only an aggressive player makes and gets his share of chances to score.

Working out of a W (wings and center forward up and insides back), taking advantage of the full width of the field to spread the defense, attempting to over-load one area then quickly shifting the attack to the defense's weakest point—furnish logical ways of creating scoring opportunities.

#### DEFENSIVE PLAY

Many coaches emphasize defense to the point where their teams have absolutely no offense. A purely defensive team will never encourage spectator interest nor create an over-abundance of enthusiasm among the boys themselves.

The goalie should be the key to the defense because he is in the best position to direct it. He should keep his fullbacks out far enough so that he won't get screened on a shot and yet not out so far that lobs can drop behind them for the opposing forwards to come racing in on. He should also direct the halfback line.

The players should have a complete understanding of their duties in all the various situations. Most systems call for the fullbacks to cover the wings and the halfbacks to cover the insides. Some coaches allow the fullback and halfback to have an understanding and switch on their men.

The center halfback usually covers the center forward, but again a switch may be made.

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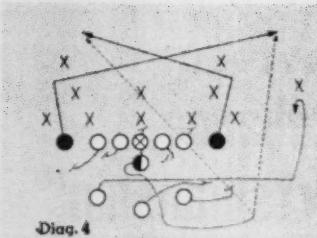
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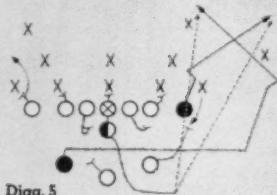
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## Deep Passing Game from the T

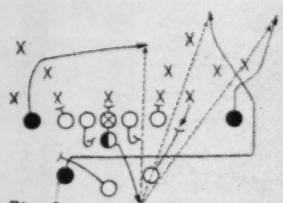
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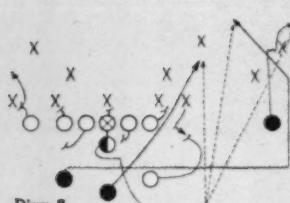
Diag. 4



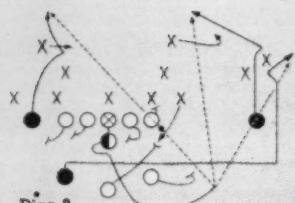
Diag. 5



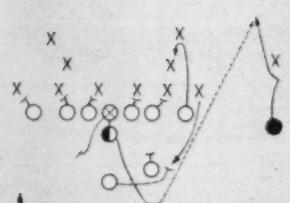
Diag. 6



Diag. 7



Diag. 8



Diag. 9

Granted that this feat is accomplished despite the best efforts of the offensive end and motioned back, the defense will still find itself in an unenviable state of commitment. The closer the safety and defensive right half cover the offensive left end and man-in-motion, the more they uncover the area into which the offensive left half is breaking.

Theoretically, of course, the defensive linebacker is there to pick up this receiver the instant the latter crosses the scrimmage line. However, at best, it is no easy assignment for even the most expert of backers, and it is doubly difficult when the left half's spring through the line breaks off from a feint and is masked by the fullback's crossing over to block the end.

Nor is there comfort for the defense in the hope that its own left half may be able to move over in time to be of assistance. Should he attempt to do so, the offensive right end, who is understandably on the alert for just such a move, has only to move into the vacated area.

The idea of masking the start of an intended receiver is a basically sound subsidiary tactic which often pays high dividends. When the receiver is a backfield man, the masking operation poses no great problem as there are various ways in which it may be accomplished. However, when the key receiver is an end, it is usually necessary to bring him over laterally behind the line and break him either through the line or around the far side.

Diag. 3 illustrates one way in which the operation may be executed.

In this case, the fullback is sent in motion short to the right side. The halfbacks start to divide toward the sidelines, with the right half turning in quickly to block the defensive left end and the left half sliding around to come in just behind the quarterback as the latter fades preparatory to drifting wide and throwing from an outside pocket.

Meanwhile, the fullback comes around out of his motion and races back to provide pot-shot blocking against any defender who has succeeded in slipping through to trail the quarterback. While this is transpiring, the offensive left end goes down and bends across the middle, attempting to draw one secondary opponent with him while he proceeds to screen another.

The right end slips in behind his own line, darts through the gap which the blockers have opened between the defensive guards, moves up the middle a few strides, then veers to the left and courses down the sideline. The right end is the primary receiver, while the left end, who may swing

deep after screening his man, is an important optional receiver.

Another type of long pass which is a favorite among aerial-minded coaches, is the "deep-cross." There are innumerable variations of this maneuver, and all of them are good—provided adequate protection is afforded the passer.

The example shown in Diag. 4 is one of the best and most widely used versions of the play.

It will be noted that there is a strong draw to the outside as a result of (1) the left half's motion, (2) the right half's starting to divide toward the sideline before coming back in as a blocker, and (3) the quarterback's faking to the full as the latter crosses to block the end.

This combination of initial moves should have its effect upon the linebacker and defensive halfback on that side, and tend to render the deep middle defender vulnerable to the type of pass in which the play culminates.

Also noteworthy is the fact that the flight of the pass from the thrower's hand to the left end crossing behind the safety, has less lateral deviation than is the case on many deep throws. As a result, every yard of the ball's "carry" is along a line of direct penetration of opposing territory.

Even a passer who is able to throw only a moderately long ball, will be capable of striking farther behind the defense than would be possible were the flight of the ball at an angle rather than parallel to the sideline.

While variations of the deep-cross on which the receivers break past each other over the middle, are among the most widely used of the long-passing measures, deep-crossing tactics may be executed even more effectively when the braking area is removed to one side or the other as shown in Diag. 5 (deep-outside cross).

This pattern is especially difficult to defend against, as it throws the burden of coverage on two of the three defensive men while leaving the linebackers in a virtual "no man's land."

The chief advantage of the outside-cross (Diag. 5) over the deep-middle-cross (Diag. 4) is that in the outside pattern, the man-in-motion not only decoys and spreads the defense, but also makes his break in such a manner as to become a key receiver himself once the ball is snapped and he has gone downfield.

Thus an additional man—the end on the opposite side of the offensive formation—is freed of pressing downfield duties and can serve as an additional primary blocker.

Some T-system passing attacks place great stress upon the outside crossing principle, and work elabo-

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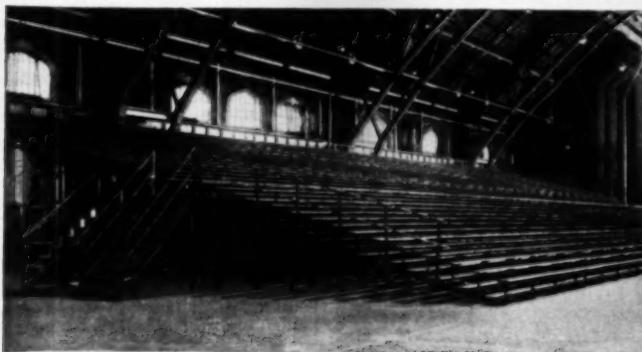
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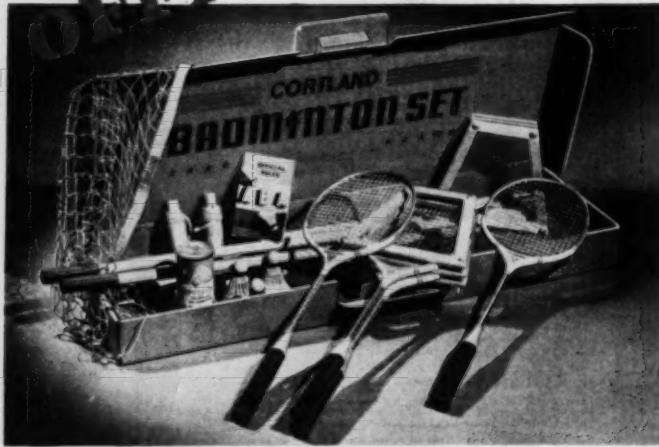
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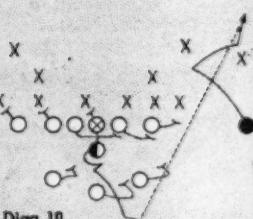
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rate variations of it into their repertoires. Such teams will either split off an end and halfback as wide flankers, or will flanker the end and run the halfback in motion to that side.

This leaves the passer, his protection, and an optional receiver on one side of the field, and the two primary receivers far out on the opposite flank. By placing the two most adept pass-catchers in this position, it is possible to run them over a bewildering series of hard-to-cover paths and patterns to various points of reception.

The next few diagrams outline a series of closely related pass plays which, when run in calculated sequence, exert terrific pressure upon vital portions of the opposing defense.



In **Diag. 6**, the flanker and man-in-motion run a deep scissors pattern while the left end goes down fast and breaks across the middle. The latter should try to gain a lead on the halfback who covers him, as this will force the safety to protect the deep central zone—thereby leaving the wide defenders unaided in their difficult task of covering the wide pattern.

Somewhat similar to the preceding play is the one shown in **Diag. 7**. This maneuver features a slightly altered scheme of blocking, and achieves greater up-draw due to the nature of the backfield faking and the quarterback's swing at the end of his fade-back.

However, the play's most striking aspect is the manner in which it achieves simultaneously the screening of one deep defender, the pinning down of another, and the forcing of responsibility for coverage of a third long receiver upon a linebacker who is in poor position to assume the task.

As indicated, the right half employs a hook-in type of block on the defensive end, while the fullback takes a fake from the quarter and drives through as if on an off-tackle slant.

Turning upfield, the full suddenly becomes a highly dangerous potential receiver, one to whom the quarterback may throw with devastating effect while the defenders are scrambling desperately to cover the wide crossing of the flankers. If the safety should pick up the fullback, the latter can veer sharply to decoy him away from the target area.

When the defense becomes wary of the crossing tactics and begins to ad-

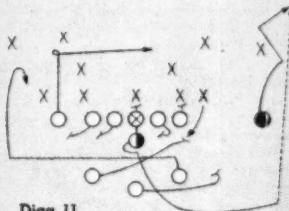
just to it, the offense may counter by having the two wide receivers feint as if to cross and then break sharply away from each other as shown in **Diag. 8**.

An important feature of this play is the manner in which the left end takes advantage of the widely deployed defense. By curving in slightly as if to "bend" over the middle, the end feints toward sensitive territory. A halfback who is conscious of the vulnerability of the middle area, will frequently commit himself on the feint, thereby enabling the end to turn back to the outside with a burst of speed which will carry him into the clear.

In addition to the wide crossing tactics already outlined, the flanking principle has another important application to the problems of the long-passing game. This approach consists of designating a key receiver, giving the passer the maximum in protection, and placing dependence for the play's success on the ability of the flanker to outmaneuver the wide defender who must cover him. **Diags. 9-12** illustrate some of the ways in which this strategy can be carried into effect.

**Diag. 9** employs a set backfield flanker rather than a man-in-motion. Many coaches feel that this has the double advantage of insuring a more complete lateral deployment of the defense, while at the same time conserving the receiver's energy for the all-important downfield sprint.

In **Diag. 10**, the primary receiver is a wide end who runs the proverbial mile to get the all-important few yards' edge on the defenders. The play is unique in the length of time which it allows the passer as a result of its concentration on defending him against rushing. Also, because the path of the receiver is of such unusual course and length, the defenders usually have a difficult time in keeping him covered over the whole route.



**Diag. 11**

**Diag. 11** indicates another means of breaking a good pass-receiving end in such a way that it is virtually impossible for the defense either to "jam" him before he gets out of the line, or to "box" him by multiple coverage downfield.

Note that the man-in-motion and the left end draw the defenders far to the left while the flanked right end feints his opponent even farther to the right before making his break

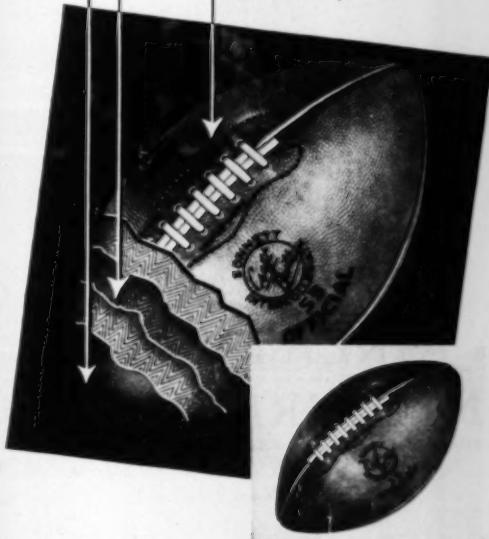
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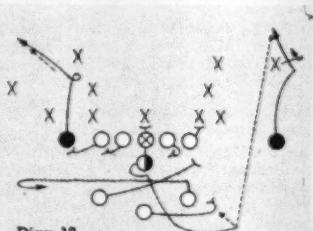
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into the uncovered middle area. The protection given the passer on this play is also a bit unusual in that the pocket from which the throw is made, is set up slightly wide to the right and away from the direction of the motion.

Also, the line-blockers move to the left, while the two backfield blockers drive to the right, with the left half usually meeting the incoming end with a straight shoulder block an instant after having taken a fake from the quarterback. The fullback contributes both draw and blocking strength by starting wide as if to go out into the near flat, then coming around in readiness to apply a peel-back block on any defender breaking through.

When the defensive man detailed to guard the flanked end displays an ability to cover the latter's fake-and-break, it is time for the receiver to resort to a "double-fake-and-break." When the latter indicates this to his quarterback, it is well for the field general to have at his command a device such as that shown in **Diag. 12**.



The important feature of this play is the out-in-out path of the right end. The receiver starts with a "bend-out" similar to his feint in **Diag. 11**, then breaks back in exactly the same way. However, this change of direction is not the real break; it is merely a second feint. While making it, the end focusses his attention on the reaction of the man covering him. The instant he senses the defender covering back toward the inside, he makes his real break, which is outward and deep downfield.

The preceding two plays, when used in a flanked-end sequence, can be varied by a simple reversing of the receiver's feint-and-break directions. To effect the change, the right end in **Diag. 11** would feint in and break to the outside, while in **Diag. 12** his course would be in the nature of an inward feint followed by a false outward break and culminating in a final deep-cut down the middle of the field.

The foregoing is a broad treatment of some of the major long-passing possibilities from the T. It does not pretend to cover the whole range of means whereby the deep-striking aerial strategy may be implemented. The plays diagrammed represent only a few of the many interesting combinations.

## Your Gym Plant

(Continued from page 44)

movable benches. No fixtures, such as pipes and radiators, should be exposed where they are a hazard to those dressing.

Shower rooms should be large enough to accommodate the peak loads. Approximately 14 square feet of floor space for each shower head, and one shower head for each four to six pupils of the peak load, is recommended. The old-fashioned individual shower type for girls is not recommended for a number of reasons, among them, the added hazards of so much extra equipment. If "runaway" showers are to be installed, the lane should be at least 30 feet in length and have directional changes to prohibit bathers from running through.

Here again, the nonslip floor and non-abrasive walls are the most important safety precautions. Shower pipes should not be exposed, and control valves should be of the self-mixing type.

The temperature of the water should be thermostatically controlled not to exceed 110 degrees F. Fewer accidents occur when wheel controls, instead of levers, adjust the flow of water.

The slope of the floor for drainage should not be so great that it makes footing hazardous. Electric lights should be controlled by a remote switch that is outside the shower room. An electric fan blower will eliminate the accumulation of steam, which often is responsible for accidents in the showers.

**Drying Rooms.** The floor of the body-drying room should be of a nonslip material. Pegs or racks for the hanging of towels should be at least seven feet from the floor to eliminate the danger of striking them. Benches or stools should not be provided in this room.

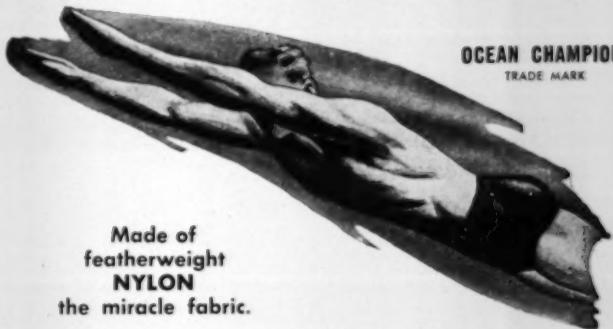
**Toilet Rooms.** From the standpoint of safety, doors should not be provided on toilet stalls; lavatories should have mixing-type water faucets; and floors should be of the same texture as the nonslip dressing room floors.

The first-aid or athletic training room should be planned for these purposes only, and so located as to be readily accessible from all parts of the athletic plant and other school buildings. The entrance must be large enough to insure easy access for a stretcher patient, and sufficient electrical outlets should be installed to eliminate the need for makeshift wiring.

Plumbing fixtures and therapeutic devices should be planned and installed with a view to their safe use by patients. There should also be an available space which can be locked, for the safe storage of poisons and medicines that might be dangerous when not used under supervision.

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## Play Spotting in Scouting

(Continued from page 28)

Why are some clusters strong and others weak? Maybe the defensive men in some areas are poor defenders. Maybe the decoys set up the play. Maybe the height of the receiver is the reason.

It is up to the scout to analyze these points and include them in his report. When handled properly, such a chart will shed a lot of light on the strength and weakness of an offense.

For example, why is 55 strong on sideline passes and weak on deep bend-ins? Perhaps because he takes the sideline throws on his left and the deep passes on his right. Many players are weak on one side or the other.

In similar fashion, No. 66 appears excellent in the short flat but weak in other areas. Perhaps the wide defense was poor, or maybe the passer was a specialist on short tosses. His percentage certainly was best in the short areas. The chart clearly shows that the team didn't throw to 60 and 70. Why?

It is easy to see, after a study of this chart, that the same idea may be employed in measuring the successes and failures of ball-carriers.

### MUST ANTICIPATE PLAYS

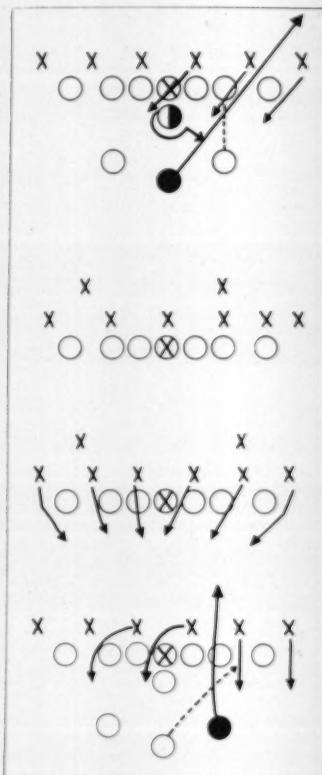
The next most important phase, I believe, is the ability to pick out plays that appear identical, yet have key variations that make the play go. To do this, the scout must be able to anticipate the coming play. Then he must visualize the key blocking patterns along the line and, at the same time, spot the handoff or running areas in the backfield.

Diags. 3 and 4 show these areas in both the single wing and T patterns.

In the single wing plays (a double trap), all the line and backfield assignments remain the same except that the fullback and tailback switch jobs. In the first play, the full fakes the handoff and blocks the tackle, while the tail carries. The second play finds the full carrying and the tail spinning back on the tackle.

The T plays (Diag. 4) delineate gate blocking on a stutter play and on a quickie or right half through. Although the line play would indicate that the plays are identical, there are enough differences in the backfield movements to catch the eye of the wary scout.

From this blocking setup, the guard can be trapped whether he



Diag. 5. Variations in Line

comes across or not. In the upper play, the quarterback fakes in front of the fullback and then hands off. In the lower play, he hands off and then fakes to the fullback.

The dotted areas show the locations that the scout must be able to handle. These are the places where spins, screens, and handoffs are likely to throw him off in his charting.

The third phase which needs long hours of study and patience is the spotting of variations used in modern line play. The scout should be able to correctly report on 5, 6, 7, and even 4-man lines. Whether they diverge, loop, wait, or fall off, is of prime importance. When such variations are used the coach will want to know where they are used and what players are keying their success.

Diag. 5 shows just a few varia-

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tions that many coaches are interested in spotting.

The first setup diagrams a line playing a combination of square charge and looping charge. If the scout picks up this movement, the coach will be able to employ straight handoffs in the areas that open up due to the loop. Notice how a slant by the fullback (dotted line) would be useless in this case.

The second setup shows a form of diverging line that can do a lot of harm to inside stuff. If spotted ahead of time by the scout, the coach can make allowances to reduce it with flankers and spreads.

Overshifted lines (as in the third setup) cause many scouting headaches. It is vital for the scout to dis-

criminate between a half-man shift and a full-man shift (as shown). The scout should also note the compensation by the linebackers and spot those who like to shove their noses too close to the line.

If the scout can spot the converging line (fourth setup) ahead of time, he can suggest that the coach use slants to offset it. Notice how the slants would find their alley and how straight handoffs would fail. The following phases represent more or less of a check list. However, none of them should be considered lightly enough to pass over. Many of them have more than once spelled the difference in a ball game.

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spots, high or low crown, prevailing winds or air pockets that might effect kicking. If used for night games, how is lighting? How many standards and lights per standard? Show blind spots, brightly lighted areas or probable weather variations from day games. Show also, distance to dressing rooms, phone connections to bench, position and visibility from the press box. Any noticeable landmarks or sighting points which can be used for spot kicking? Is field tarpaulin available? Are end zone and goal line markers single, double, color chalked? How much free space beyond end zones.

*Background information on coaching staff: Head coach? Assistants? Former coaching positions held. What degree of success? What systems used in previous years. Any other additional comment.*

*Background information on the meeting of the two teams: Is this game a traditional one? Does either team consider this contest a turning point in its season? Are both teams at full strength? Indicate key players out of lineup. Team favored. Last year's record and present season's record to date.*

## INFORMATION ON PASSERS

*Pregame warmup on passing: Comment with names and numbers on passers, receivers. Passers right or left handed? Timing, what type of pass used? Do they favor any particular receivers? Do they throw out of spins? After fakes? Show any running passes? Stop and go? Buttonhooks? Split vision? Spot passes? Quick throws? Delayed throws? Shovel passes? Anyone have a tendency to overthrow? To underthrow?*

*Pregame warmup on punters: Name, number and position. Type of kicker, number of steps. Time: Fast, slow, medium? Height of ball kicked? Spiral, end-over-end, forward roll, backward hop? Drifts right, left, no drift.*

*On conversions and field goals: Name, number, and position of kickers, holders, and centers. Comments on attempts. Holder's position and distance from center. Do they use a tee? Tape? Other sighting device? Drop kickers? If so, give name, number, and degree of success. Comment also on center's passing, type of pass used, and faults, if any, of his stance.*

*(Ed. note: Coaches who remember Johnnie Golden's fine article on his unique Swinging A single wing, in the October 1947 issue, will be interested to know that in response to numerous requests he will enlarge on this formation in next month's Scholastic Coach.)*

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## T Quarterbacking

(Continued from page 8)

being kept on the ball until the moment it is given to the back or pulled away and given to another back.

Sometimes the pattern of the play won't permit a quarterback to make too definite a fake to a back. In these situations, the quarterback may employ a shoulder dip, keeping the ball tucked away and dipping with his shoulder as the faking back comes by. This often leads the backers-up and defensive halfbacks to believe that he is using the arm of that shoulder to hand off with.

Some plays call for a quick hand-off and a follow-up fake, and a good quarterback will always carry out these fakes realistically to help set up future plays from the same sequence.

The two basic pivots—the reverse and the forward—are illustrated on page 9. You'll notice that the back foot always serves as the pivot foot, while the front foot is the directional finder.

In the forward pivot, note particularly that the quarterback takes a short step with the left foot before taking his regular long step for the feed (to the left halfback). This little step is important. Without it, the quarterback would be forced to overextend his feeding arm, thus increasing the danger of a fumble. The arm should never be stiffly extended. The elbow should be bent and the ball kept inside the line of the body.

In concluding, let us briefly review the cardinal points of ball-handling and footwork in T quarterbacking:

1. Upon receiving the ball, the quarterback must execute precise steps to exact spots, for the hand-off.

2. The ball must be tucked into the belt buckle at all times. This provides concealment and eliminates the danger of the elbows being jostled by enemy linemen.

3. The ball should always be handled on the same plane or level, with the buckle serving as a guide. "Buckle to buckle."

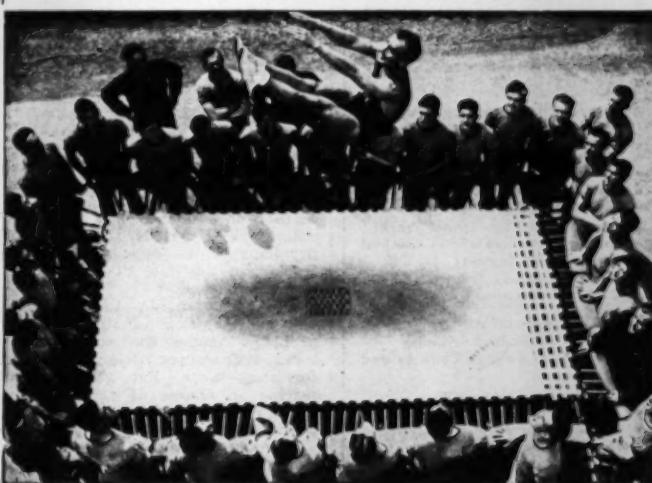
4. Always carry out a fake.

5. Know the individual characteristics of the personnel perfectly.

6. Don't be in a hurry to leave the center; don't leave until the ball hits the top hand. "You can't execute without it."

7. It's in the feet as well as the hands—learn your steps—practice, practice, practice. "Think with your feet as well as your mind."

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The authors approach the subject along 20 broad lines, namely: Significant phases of organization and administration, relationship of physical education to general education, aims and objectives, administrative policies and activities, the service program, the staff, school health education, the physical ed plant, interschool athletics, intramurals, student leaders, class detail, finance, purchase and care of equipment, publicity, recreation, organizations, and tests and measurements.

The authors have tried to make the book complete and adequate in itself, balancing the ideal and the practical, theory and experience. The result is an extremely readable, balanced, and practical text.

- RESEARCH AND WRITINGS ON TRAINING, CONDITIONING, TREATMENT OF ATHLETIC INJURIES, AND CORRECTIVE WORK. Volume I and Volume II. By Dr. Wilbur Bohm. Pp. 49 (Vol. I); pp. 57 (Vol. II). Illustrated—tables and photos. \$1.25 each.

ONE of the most energetic and respected trainers in the business, big Doc Bohm has been plying his trade for over 20 years. He trained the athletes of Washington State College from 1926-43, worked over the Washington Senator baseballers in 1946, handled the Washington Redskins footballers from 1943-47, and now trains the Cincinnati Reds of the National League.

His two books represent the fruit of his long, practical experience in the field of physical conditioning. They provide a source of practical and tried material for coaches, teachers, physical educators, and other practitioners of the training art.

Volume I covers: Football injuries, water on the knee, how champions train, shoulder injuries in football,

falling hair, knee injuries, bruise of the crest of the ilium and its treatment, training and conditioning the high school track and field athlete training practices of professional football coaches, trainers and players, evidences of a successful corrective program, and a survey of infantile paralysis.

Volume II embraces: The common cold, modern basketball from the training standpoint, training and conditioning practices of college coaches and trainers, taping the ankle joint, the anatomy of the ankle, training and conditioning of wrestlers, mechanical effects of the common curves of the spine on the organs of both the thoracic and abdominal cavities, the daily four (exercises), early season training in football, difficulties which might result from stretching of supporting structures, and the training diet in football.

All this material is clearly and simply presented and should prove of practical assistance to every high school and college man interested in physical conditioning, treatment of athletic injuries, and corrective work.

Copies may be ordered direct from Dr. Wilbur Bohm, Cincinnati Baseball Club, Cincinnati, Ohio.

(See advertisement on this page)

- AFTER THE WHISTLE BLOWS (Recreation in Industry). By Jack Petrill. Pp. 351. New York: The William-Frederick Press. \$10.

AFTER the whistle blows in the nation's large industrial plants, what do the men on the assembly line want? They want friendliness, understanding, a chance and the facilities to relax and do the things they want to do, and a time to forget the complexities of the day's work.

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The purpose of this book is twofold: First, to provide the active intramural director with a handy reference when he is making schedules and planning new intramural events; second, to provide professional students in physical education with a basic workbook in this field. It is not generally concerned with actual playing rules and game descriptions, but rather with giving tips about sports and rules that have proved helpful in the actual use of these sports in intramural competition.

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Designed to advance the cause of sports which build endurance, skill and morale, this book is aimed at the athlete, the prospective coach in training, and the coach now on the job. It presents material useful in building a sound and interesting athletic program for young men—and leaves the field of sports for girls to others more interested in their development.

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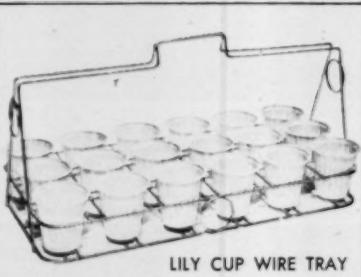
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tradition of industrial recreation, presents yearly schedules for leagues of from four to 40 teams, offers individual handicap charts, and analyzes leisure time, safety, gambling, annual reports, and finances.

This practical guide is a worthwhile addition to the literature on the field, and should prove considerably valuable to recreation leaders everywhere.

• **THE KINESIOLOGY OF CORRECTIVE EXERCISES (Second Edition).** By Gertrude Hawley. Pp. 192. Illustrated—drawings. Philadelphia: Lea & Febiger. \$3.75.

SPECIALISTS in the field of corrective exercises will find this book a complete text on the therapeutics of movement. It provides the essential knowledge of human anatomy and physiology, and of kinesiology and physics. The author, formerly head of corrective gymnastics at Stanford and Northwestern, presents the special training needed to recognize faulty growth and malfunctioning, and shows precisely how to ameliorate such conditions.

For her second edition, Miss Hawley has revised the text throughout to bring it up to date. She has added new exercises for the shoulders and feet, and has included 18 new illustrations.

The book is divided into two parts. Part I covers fundamental anatomical and pathological considerations, and includes a discussion of the orthopedic conditions most commonly encountered in the field.

Part II presents definite posture standards and corrective exercises for each of the conditions that require remedial measures. All of the exercises have been successfully employed by the author either under college conditions or in the practice of physiotherapy.

• **THE TRU-CHART SCOUT-PAK (A Football Scouting Form and Summary).** By Johnnie Golden and "Sarge" MacKenzie. \$4.50.

ONE of the nicest surprises an editor can get is finding gold in an unsolicited manuscript—discovering that it is well-written, meaty, and ingenious.

Last year we were particularly fortunate in uncovering quite a few of these "sleepers." Especially impressive were a pair of articles contributed by two Californios—Johnnie Golden (Gilroy Union High School) and "Sarge" MacKenzie (U. of San Francisco). We struck up an acquaintance with both men and got them to work up some new stuff for 1949—which you'll find elsewhere in this issue.

We mention this by way of introducing their ingenious new scouting form called The Tru-Chart Scout-Pak. Designed to enable scouts to achieve the most complete coverage with the greatest possible accuracy, the Scout-Pak permits the espionage agent to collect his observations with

a minimum of writing.

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Orders may be mailed to John E. Golden at 3218 Florida St., Oakland, Calif.

- 1949-50 SEAL-O-SAN BASKETBALL COACHES DIGEST. Pp. 64. Illustrated—photographs and diagrams. Huntington, Ind.: The Huntington Laboratories, Inc. Free.

THE ninth edition of the Seal-O-San Digest is an elegantly turned out book, crammed full of extremely valuable technical information for the basketball coach. It contains the finest basketball material published by the nation's outstanding coaching magazines last season, and is liberally illustrated with diagrams and pictures.

Thirty-one of the country's outstanding coaches are represented in the book. There are seven articles on defense, 12 on offense, five on fundamentals, and six on various other subjects such as strategy, conditioning, and training.

Among the more famous coaches represented are Adolph Rupp, Phog Allen, Everett N. Case, Jack Gray, Cliff Wells, Clair Bee, Bud Foster, and Marion Crawley.

Coaches may obtain their free copy by checking the Huntington Labs. listing in the Master Coupon on page 87.

(Concluded on page 74)

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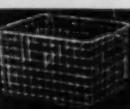


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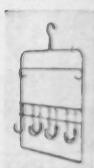
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(Continued from page 73)

### MISCELLANEOUS

- CHAMPIONSHIP TECHNIQUE IN TRACK AND FIELD (Second Edition). By Dean B. Cromwell in collaboration with Al Wesson. Pp. 333. Illustrated—photographs. New York: Whittlesey House. \$4.

CROMWELL'S beautifully illustrated, comprehensive, meaty technical coaching text, plus a new interesting chapter on his observations on the 1948 Olympic Games.

- BASEBALL'S GREATEST TEAMS. By Tom Meany. Pp. 276. Illustrated—photographs. New York: A. S. Barnes & Co. \$3.

AN absorbing account by one of America's outstanding sportswriters of the 16 greatest teams in history, starting with the 1908 Cubs and winding up with the 1942 Cardinals.

- CORRECTIVE PHYSICAL EDUCATION (Fourth Edition). By Josephine Langworthy Rathbone. Pp. 300. Illustrated—drawings and photographs. Philadelphia: W. B. Saunders Co. \$3.75.

THIS hardy perennial has been soundly revised in line with all the developments in the field since the third edition appeared in 1944.

- SATURDAY EVENING POST SPORTS STORIES. Edited by "Red" Smith. Pp. 307. New York: A. S. Barnes & Co. \$2.50.

AN extremely readable collection of the finest sports stories (both fact and fiction) that have appeared in The Post since 1932, culled by that wonderful sports columnist, Red Smith. Includes selections by Ring Lardner, James Thurber, Harry Stuhldreher, Paul Gallico, J. P. Marquand, and 16 others.

### JUNIOR H. S. TRACK MARKS

Back in June, Coach George A. Johnson of East Junior High, Warren, O., told us that he had a 15-year-old boy who had hurled the discus 135 ft. and the shot, 42 ft., and wanted to know whether these constituted records for junior high competition.

Writes Hilary Jefferson, High School of Commerce, Yonkers, N. Y.: "Coach Johnson will probably be interested in the following junior high school track records—Anthony Kalcow (16 years old, ninth grader), 8 lb. shot, 45'3"; 100-yd. dash, 10.3; standing broad jump, 9'3". Roy Kearney (15 years old, ninth grader), running broad jump, 21'5".

"Both these boys were students at Hawthorne Junior H. S., Yonkers. For nine years, this school took on all comers in track and did not lose a meet. In 1936, incidentally, its 440 relay team reeled off a 47.5 timing."

The meets were run on a coefficient or similar basis.

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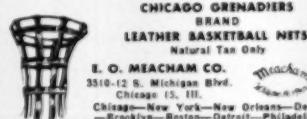


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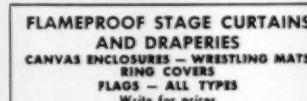


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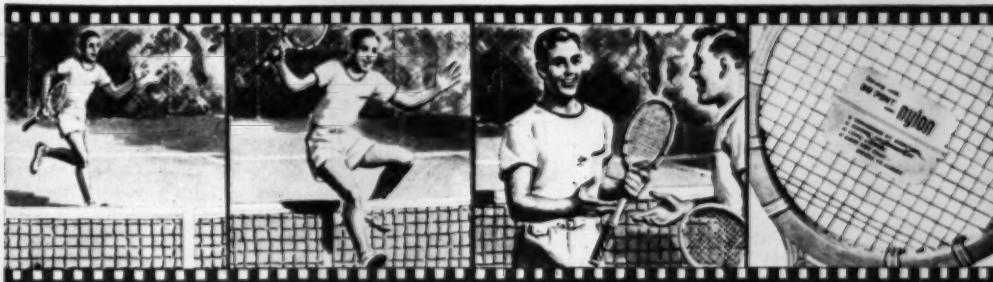
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# Coaches' Corner

Please send all contributions to this column to Scholastic Coach, Coaches' Corner Dept., 7 East 12th St., New York 3, N. Y.

**E**N ROUTE to Litchfield, Ill., to speak at a high school football banquet, Burt Ingwersen had to pull up at a garage when his motor began to miss very badly. The mechanic inspected the car carefully. "Sounds bad," he said. "It will take two or three hours of work."

Ingwersen groaned. "Can you fix it for me tonight? I have to leave for Bloomington early in the morning."

"Sorry," answered the attendant. "I'll have to fix it tomorrow."

"Look," said Burt, "I'm the line coach of the Illinois football team and I have to be at Bloomington to speak tomorrow noon."

"Oh, so you are Burt Ingwersen? Well, I saw your Ohio State game last week, and I sure as hell will get you out of town tonight!"

**Accuse us** of heresy, if you will, but isn't it about time somebody scotched that Tinkers-to-Evers-to-Chance myth? The old Cub double-play combo was a dandy, all right, and the alliteration of their names made fascinatin' rhythm. But actually they were not outstanding DP-makers. Although they operated in the heyday of defensive baseball, none of their double-play marks has stood the test of time. Another thing: In the 16 world series games they played, they failed to come up with a single double play!

**Finding himself** in a strange town with time on his hands, the visiting football coach decided to explore the local insane asylum. An attendant took him up to the first floor, marked "Mild Cases." The coach noticed a figure kneeling on the floor with hands clasped in prayer. "Who is that?" he asked.

"Oh, that's a football coach who applied for a job and didn't get it. His mind just snapped. But he'll be all right in three or four years."

The visiting coach was then escorted to the second floor, where the more severe cases were interned, and thence up to the third and fourth floors. Finally he arrived at the top floor, where the most violent and incurable cases were quartered. There in the center of the room was a wild-eyed fellow with legs askew, roaring: "Drive! Hit 'em hard! Keep your head down! Keep those legs moving!"

"What happened to this guy?" the visitor asked.

"He," answered the attendant, "is the guy who got the job the fellow downstairs missed up on." (Relayed by King Kong Klein, of the Westchester, N. Y., Recreation Commission.)

**Pete Gray**, the one-armed ball player, is fond of telling about the barber who cut his face to ribbons and then, after lengthy use of the stypic pencil, brushed him off cheerfully, saying, "Haven't I attended to you before, Mr. Gray?"

"No," Pete answered, "I lost my arm in an automobile accident."

**The one thing** nobody could accuse Gene Tunney of is modesty. Reading his article, "The Truth About My Fights With Jack Dempsey," in Sport Magazine, you get the feeling that Tunney looks upon himself as a combination of Jack Armstrong (the All-American boy), Napoleon, William Shakespeare, and Buck Rogers. He

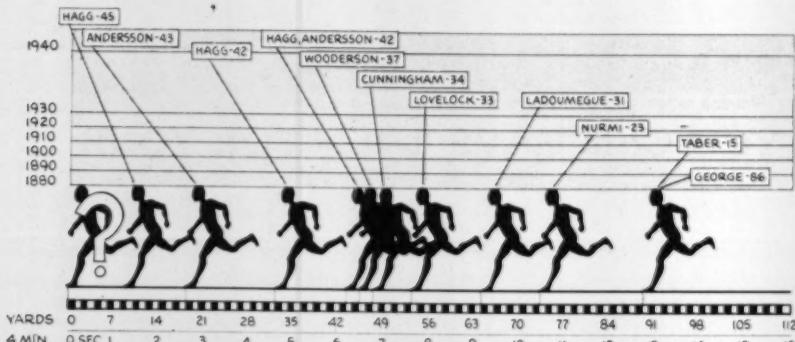
isn't the least bit bashful about telling how clever and strong and intelligent he is. In pure lifting prose, he describes his sagacious preparation for the Dempsey fights and the methodical way he took the great Dempsey apart.

Nowhere in his lengthy exegesis does he mention that Dempsey came into the ring soft and rusty from two years of easy living, that Dempsey was now in his 30's and a hollow shell of a once great fighter. But the crowning touch comes at the end. After carefully explaining how easily he handled the Manassa Mauler, Tunney magnanimously declares that Dempsey was "possibly the greatest fighter that ever entered the ring." Which makes Tunney the greatest fighter that ever jabbed a typewriter.

**Johnny Core** is a mighty proud guy these days. He has just heard that his ingenious Five Star Track Event was used as the basis for an international track meet between The Stony Brook School (Long Island, N. Y.) and the Kongsberg Høgskole Almenskole of Kongsberg, Norway. The two schools competed on their own home grounds, scored the events (high jump, broad jump, shot put, 100 yards, 880 yards) on the Five Star cards, and air mailed each other the results. The meet was a humdinger with Stony Brook eking out a 1105-1024 win.

**Shades of Iron-Man McGinnity!** On May 21 at Northfield, Minn., Bob White, Lakeville High School hurler, pitched all four games of a tournament and won 'em all! The preliminary games ran five innings each and the final, seven. White allowed a total of four runs and ten hits. In the championship tilt, he drove in all four of his team's runs, personally accounting for the tie-breaking run with a homer. Joe Bush or Frank Merriwell couldn't have improved on the act.

## THAT 4-MINUTE MILE



Will anybody ever run a mile in four minutes? The world record in 1886 was 4:12.75. It stood for nearly 30 years, and has since been reduced to 4:01.4—a reduction of only 11.35 sec. in 63 years. This chart, based on an original from the *Student Digest* (New Zealand), shows how a race between all the great milers might have ended according to their

best times. The runners and the years in which they ran are indicated at the top, while the scales at the bottom show: (1) The number of yards each runner fell short of the four-minute mile; and (2) The number of seconds over the four minutes taken by each of the contestants. Up in front is the ? who might yet do the mile in four minutes.

Another iron-man act worthy of note was the stunt pulled by Mario (Red) De Lucia, Manlius Military School athlete, on May 12. In a track meet against the Colgate Frosh at Hamilton, N. Y., Red won the shot-put, discus, and javelin events. He then hustled back to Manlius in time to break up a baseball game with a two-run homer!

Just in case the six-man football pony express missed your town this year, you ought to know that two changes in the rules have been authorized: (1) "Any number of substitutes may enter whenever the ball is dead." (2) "If kick-off is out-of-bounds, ball belongs to the receivers (even on the first kickoff)."

It's nice to report that the Hollywood jukes are doing all right by sports for a change. After *The Babe Ruth Story*, we were ready to cashier the movie moguls out of the human race. But they redeemed themselves this season with four good films.

*Champion*, though sticky with blonde menaces and hocked-up situations, is exciting entertainment. *The Set Up*, a more modestly budgeted fight picture, has it all over *Champion* for savage realism. Robert Ryan is simply wonderful as a washed-up pug, and the dialogue and background shots make this the most tense and realistic fight picture ever filmed.

*It Happens Every Spring* is a completely captivating piece of whimsy. Though Ray Milland, a college prof turned pitcher, looks pathetic every time he throws a ball, the picture will delight you.

*The Stratton Story* is a dandy all-around film—poignant, tender, and exciting. The baseball scenes are the most authoritative ever shot, and Jimmy Stewart—praise the Lord—looks and moves like a ball player.

Nuggets from the typewriter of our favorite radio critic, John Crosby: "There are some grievous sins committed in the name of baseball (announcing). Home runs are not home runs any more. They're Chesterfield Satisfiers or Ballantine blasts or White Owl wallops. . . . The blame rests squarely in the laps of the scribes. (You can tell a scribe from a writer very easily. The exclamation point on the scribe's typewriter is worn to a nub and there is usually a thin, yellow trickle of adverbs oozing out of the left side of his mouth.)

"While on the subject, I'd like to suggest that 'It's going! It's going! It's GONE!' has had its day and ought to be retired to Cooperstown with the other relics. Also, I get a queasy feeling in the center of my stomach when I hear that the wounded veterans of Halloran Hospital are going to get 1,000 cigarettes because Stan Musial whaled one into the right field stands. It's unfair to Musial. If he had had bad day at bat, he has on his conscience all those wounded veterans going smokeless."

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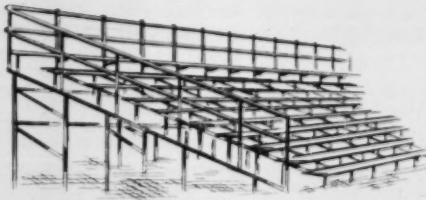


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## Cross-Country

(Continued from page 36)

ly a matter of self-discipline, much of the responsibility for success lies with the runner himself. First to stress is the fact that size is not a hindrance to success in distance running. Many of America's finest distance runners are small men.

Secondly, the eating habits should follow the pattern of a hearty breakfast, a light lunch, and a substantial evening meal. In regard to diet, it is well to avoid greasy and fried foods; there should be no eating between meals; no carbonated beverages; and candy should be eaten sparingly, and then only after the evening meal. The diet should be high in easily digested proteins, whole grains, fruits, vegetables, and milk.

Thirdly, regular sleep is a necessity if a runner is to have reserve strength and be able to put on the pressure when the chips are down. At least eight hours of sleep each night is an absolute must, and more is desirable.

A further point to keep in mind regarding orientation is the contacting of the coaches of basketball, wrestling, track, and baseball relative to having their team members work out a couple of times a week with the cross-country runners. The cross-country coach can set up a training program for these men which would do much to develop their wind, endurance, and staying power, besides creating an interest in cross-country itself.

The final consideration in the organization of a cross-country program is the keeping of records. These are of two types—the records that are kept during the meets, and those that are used to report the meet to the athletic director.

Accurate records are valuable means of evaluating the team's progress, the effectiveness of coaching, and the individual's progress, as well as serving for reference and publicity purposes. Examples of each type of record accompany this article.

In explaining the use of the record sheet used at the meet, it is necessary to consider the functions of the officials. To properly conduct a dual cross-country meet, the following officials are recommended:

1. A referee who also serves as starter.
2. A timer and an assistant.
3. A finish judge and an assistant.
4. A clerk of course and an assistant.

THIS is the first of two articles by Earl G. Watson, cross-country coach at the U. of Buffalo. "My purpose," he says, "is to give coaches an understanding of a sport which is rapidly gaining favor in both high schools and colleges, and through this understanding develop an appreciation of the merits which make it a valuable part of any program. I have tried to present the material in such a way as to enable a coach to incorporate it into his own program or to improve the existing program."

5. Three inspectors.
6. A doctor.

It is the responsibility of the student manager of the home team to record the name and number of all runners competing in the race. These are listed on copies of the record sheet which are given to the referee, the timer, the finish judge, and the clerk of course.

As the runners cross the finish line, the timer calls off the finishing time to his assistant who records them in the proper column and corresponding to his place of finish. When all the contestants have finished, this report is given to the clerk of course who then enters it on his form which will eventually record the complete data of the meet.

The finish judge and his helper cooperate in the same manner as the timer and his assistant. As the runners cross the finish line, the finish judge calls out the number of the runner to his assistant who records them in the proper column and corresponding to his place of finish. This completed record is also turned over to the clerk of course who then makes it a part of his official record.

After the inspectors have reported to the clerk of course, all runners who successfully completed the race may then be considered in the official standings.

Now, after all the facts and figures have been given to the clerk of course, and if there are no disputes, which have to be settled by the referee, he proceeds to list the names of the contestants and their school. Following which he lists the places for each school, then figures the adjustments which may be necessary for the scores, and finally the tabulation for the final and official meet result.

*The next article will deal with the actual coaching of cross-country running.*

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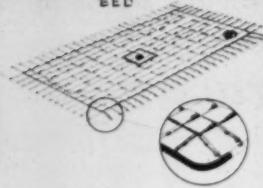
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## The Smashing Six

(Continued from page 32)

pass defense can also be built into it. The line continues to smash, rushing the passer at every opportunity. The backfield meets running passes to right or left just as if they were running plays.

See Diags. 3-7 for typical pass situations and how the backfield rotates to cover them.

The halfback on the strong side comes up fast to force the play, but is wary about going beyond the line of scrimmage, as he has the strong-side flat to cover in case the play is a fake which develops into a pass.

The linebacker keeps his angle on the runner, watching for a pass to a short man. The safety takes the deep receiver on the side of the play, while the weak-side half covers any deep receiver on his side. The weak-side linebacker drops back over center to cover that territory after making sure there is no weak-side flat receiver.

The linemen are coached first to "fill their hole." After they are sure, and only after they are sure, that no play can come through their territory, they are supposed to go after the ball and ball-carrier. They meet each play as if it were a line play right over their position.

The smashing six is occasionally varied, of course. Against strong passing teams, we use a five-man smashing line or a seven with the tackles holding their ground and dropping back if a pass develops.

When varied with an occasional change of pace, the smashing six is hard to beat as a basic defense. Few offensive players are good enough to keep a determined defensive man from going where he wants to go—so long as he knows where he is going and how he is going to get there.

This takes much of the initiative away from the offensive team. Since we know where we want to go, we don't have to wait for any cues from the offensive club.

**AUTHOR G. O. Watson** is assistant football coach and trainer (under Chalmer E. Woodard) at Liberty Memorial High School, in Lawrence, Kan. Thanks in great part to this smashing six defense, Liberty has won 72, lost 10, and tied 2 during the past 10 years.

## "Here Below"

(Continued from page 5)

At this point, we began wondering whether the researchers would ever find their way to the athletic field and what kind of ordnance they would bring up against it. They finally got there, all right, sniffed around a bit, and reported—amazingly—that the one area in which democracy works, at least for boys, is the athletic field. "Boys' athletics," they vouchsafed, "is the one area in which no association between class position and participation appears."

However, a girl whose ISC (Index of Status Characteristics) isn't right just can't make the grade as a drum majorette. The high-index gals bring pressure to bear on the instructors, and the wrong girls, even if good-looking, are eased out.

Furthermore, the teachers seem to be a rather obnoxious lot who kowtow to the social dictatorship of the town's elite, even misgrading to please the upper-class parents.

All this adds up to a thoroughly unpalatable dish of muckraking, and we, for one, refuse to swallow it. We were particularly repelled by the blithe way the socios sorted the students into "classes" such as upper, upper-middle, lower middle, upper-lower, and lower-lower—which is about as low as you can get—and by some of the techniques employed in their practical researching—techniques hardly calculated to encourage democracy in the schoolroom.

We know darn well our high schools are not perfect. Inequalities do exist, but these are just scratches on the democratic facade. By and large, our schools remain a bright, glowing example of democracy in action. In fact you could hardly find a better example the world over.

Even assuming that everything the socios said about Jonesville is true—which we don't believe—then Jonesville certainly is no typical American city, and its 10,000 natives no more reflect the thinking of our 140,000,000 Americans than a flea living in a kennel reflects the thinking of its canine world.

It will take a whole lot more substantial evidence than this to make us believe that our schools are suffering from a rising tide of class distinction. On the contrary, we believe that the only pains our schools are suffering from are growing pains—the kind that accompanies good, solid, progressive, class-free growth.

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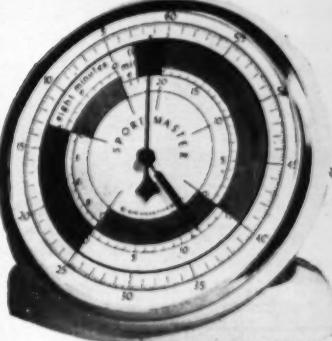
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## The Flanked Split T

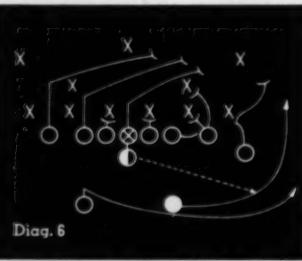
(Continued from page 11)

in front, and he knows the guard on the side where the center linebacker is plugging will take care of the backer.

**Diag. 7, Spot Pass:** Used when the linebackers are plugging the hole to stop Plays 1 and 2, it has the advantage of putting a blocker or pass receiver downfield ahead of the two other receivers. The half hits in as on Play 1 and 2 and piles into the guard or tackle, who already have been tied up on the line and

center must keep the ball out in front as far as possible so the linemen can get up even with his feet and not hem in the quarterback; the guards split six to 12 inches on either side; the tackles are 18 to 24 inches from the guards; and the ends may split any distance they like (about 24 inches would be right), remembering, naturally, that on outside plays they must not be too far outside the defensive tackles, since they will have to block these tackles in before they cross the line of scrimmage.

The quarterback may have his hands in any position he likes, but in the Split T it would be helpful to have both palms down and thumbs together with pressure on the center, since it will be best to feed the ball to the halfback with both hands. It isn't necessary to hide the ball as in other T systems.



Diag. 6

should be off balance. No matter how light the half is, he can do a lot of damage to the guard or tackle, depending on whoever he thinks needs blocking. Of course, if they are blocked out, he can continue his fake into the secondary and become an eligible receiver. He will do this on every pass to mask the play.

**Diag. 8, Deep Pass:** This puts pressure on the secondary and will go a long way if the flanker, who is a bit wider than usual, fakes a block on the half, forcing him in and leaving the right end free.

**Diag. 9, Delayed Pass:** When the defense leaves a gap down the middle, this will ruin it. The flanker either helps with the end for two counts or fakes to the outside and cuts back across the middle.

**Diag. 10, Flat Pass:** Valuable for short gains if linebackers are crashing, this can become a deep pass if necessary. The quarter may yell, "Deep!" if anything has gone wrong; he retreats, and the play shifts to a long pass. The center still delays, and in the event of a long pass, drops back for the end if no backer is plugging.

In these diagrams the flanker is shown in all but Play 5, but he can remain in the fullback position if needed.

The line sets up as follows: The



Diag. 7

The halfbacks line up in sprinter stance at any depth, three and a half to five yards. The distance depends on their individual speed in getting into the line. They split the tackles with their outside foot forward and their inside foot back. Their inside hand is on the ground, and they are leaning on it.

They move in only two directions, either forward or to the inside, except on Play 6. They should watch the hole as they drive forward; that



Diag. 8

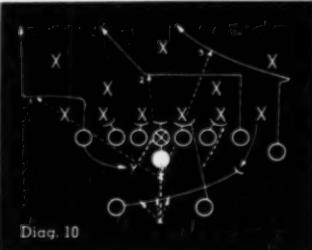


is, the defensive tackle and linebacker, and cut accordingly once they are in the hole. It is up to the quarterback to take a short step backward and then cross over quickly in two steps to put the ball into their middles. They drive into the line with the inside hand up.

The fullback sets up about four to four and a half yards back in direct line with the center and quarterback, hands on his knees. He runs directly to a point about one yard behind the scrimmage line and keeps the defensive end from crossing that line, either with a shoulder or body block. Otherwise, he may fake a block and go down for the half.

The line comes up into position from the huddle, where the center is required to repeat the snap signal, and stands in a high position with hands on knees. The quarterback calls, "Set! Ready!" and gives the signals after the tackles have imparted the defensive setup and the flanker (if any) is in position.

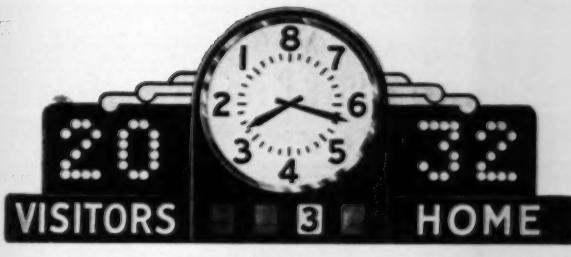
The line and halfbacks go down on the command "Ready!" Plays can be occasionally run from this position if the defense is not alert.



Now, a comment on the individual player's qualifications. Going through the positions, I would say that speed and ability to think fast are the prerequisites of every man (plus, of course, the desired standards for any player, such as desire to play, courage, and stamina).

**Ends:** Must be fast, good shoulder blockers, and capable pass receivers.

**Tackles:** The most important positions in the line because they will



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After graduating from Vanderbilt U. in 1945, John E. Aker took over the intramural program at The Taft School in Waterford, Conn. Two years later he moved on to the Newman School in New Orleans, La., to help coach football and track. Both these teams annexed the championship in their class last year.

have to charge very fast and move the opposing tackles and linebackers out of the hole.

**Guards:** Since they stay in the line most of the time, they do not have to be able to pull out too quickly, but they must be able to get the jump on the opposing linemen.

**Center:** Will have to do a great deal of running, so must be fast and a good downfield blocker.

**Quarterback:** The balance wheel of the team. Aside from play-picking ability, he must be quick on his feet, a good ball-handler, runner, passer, and blocker. The most important man in the backfield, even more so than the fullback, he must be able to think on his feet; that is, when running his pattern along the line of scrimmage, he must be able to diagnose what the defensive end is going to do and play him accordingly. It is helpful to have two quarterbacks for relief duty.

**Halfbacks:** Since they do little blocking, they may be light, but they will have to get into position quickly. The fastest starter should be the right half; if he is left-handed, so much the better.

**Fullback:** The most underrated, yet one of the most valuable players. Primarily, he should be the biggest and roughest man in the backfield who can block, block, block; and he should be able to run on bucks over the middle, although this is secondary. His most important functions are to block and to catch passes, although on pass plays he can move to a halfback spot and let the latter become a flanker. This is often the best method because the short-side half will have a difficult block to make when he crosses to hit the end.

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September, 1949

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# Why College Trainers Recommend a Caffein-Free Drink -Postum



Please read  
carefully

All scientific facts fully approved by a top medical authority—based upon tests fully described in an authoritative medical publication.

Both coffee and tea contain caffeine. And caffeine is a drug—an artificial stimulant that acts upon the brain and central nervous system. Also—in susceptible persons—caffeine tends to produce harmful stomach

acidity. So, while many people can drink coffee or tea without ill-effect—others can't. Particularly in the growing years it is important to avoid caffeine. For it can cause "coffee nerves," indigestion, sleepless nights.

POSTUM contains no caffeine or other drug—  
nothing that can cause nervousness, indigestion, sleepless nights!

## COLLEGE TRAINERS ALREADY AWARE OF THESE FACTS

For many years trainers have recognized the caffeine problem and have sought to combat it in a positive way. They have found that POSTUM provides a wholesome hot beverage—100% caffeine-free—yet a vigorous, hearty mealtime drink.

The experience of Hugh Burns of Notre Dame is typical of what many trainers have learned:



"I FIND THAT POSTUM IS AN IDEAL TRAINING TABLE DRINK. BY DRINKING POSTUM ATHLETES AVOID THE RISK OF 'COFFEE NERVES,' AND THEY HAVE A BETTER CHANCE TO KEEP THE IRON NERVES THEY NEED FOR SUCCESS IN COMPETITION."

**INSTANT POSTUM** A Product of  
General Foods

**This Weight Chart is Provided by the  
Ideal Training Table Drink—POSTUM—made  
from Healthful Wheat and Bran**

# FOO

## 3 Famous Stars who have used POSTUM since College Days



**OTTO GRAHAM,**  
*Cleveland Browns*



**CHUCK BEDNARIK,**  
*Philadelphia Eagles*



**SID LUCKMAN,**  
*Chicago Bears*

*"It takes iron nerves to play winning football," they agree. "We don't take any chances on having 'coffee nerves' . . . POSTUM's our training table drink."*



# 3 big reasons— why INSTANT POSTUM is the good health choice of Millions

- 1 Made from healthful wheat and bran—a truly *vigorous* drink!
- 2 Provides a wholesome, hot beverage at meals and bedtime—and many doctors say this aids digestion and tends to promote natural restful sleep and steady nerves.
- 3 Contains *no caffeine\**—you can drink POSTUM 'round the clock—and *feel like a million!*

**\* SCIENTIFIC FACTS:** Both coffee and tea contain caffeine. And caffeine is a drug—a nerve stimulant. So, while many people can drink coffee or tea without ill-effect, others suffer "coffee nerves," indigestion, sleepless nights. Try POSTUM-made-with-milk—"Nature's most nearly perfect drink" with POSTUM'S grain-rich flavor. Recipe on the jar—and it's delicious!

## WHY PROFESSIONAL ATHLETES CHOOSE POSTUM

For professional stars, keeping fit is a necessity, because it means their livelihood. But, like your young athletes, the professionals do not have an official training table. They must observe training table rules in their own homes.

So it is especially significant that these professional athletes choose POSTUM as the mealtime drink at their home training tables. Frankie Albert, star of the San Francisco 49ers, states his reasons this way:



"IF YOU'RE A CAFFEIN-SUSCEPTIBLE LIKE ME, THE CAFFEIN IN COFFEE CAN MEAN JITTERY NERVES AND LOSS OF SLEEP... I FOUND THAT OUT BACK IN COLLEGE! SO I STARTED DRINKING 100% CAFFEIN-FREE POSTUM—IT HELPS KEEP THE IRON NERVES YOU NEED TO HANDLE YOURSELF RIGHT IN THE BIG GAMES."

FRANKIE ALBERT  
San Francisco 49ers

Tear out  
this weight chart  
and post it  
on your  
bulletin board

Curses!  
Another Training Table  
Serving POSTUM!



# TOP NOTCH-50 YEARS NEW



This year marks the Fiftieth Anniversary for the makers of the famous Top Notch basketball footwear. And we can truthfully say that Top Notch is *50 years new* because nearly every year, starting with the famed 1914 Gripsure molded outsole, Top Notch has introduced new designs and new features for the foot comfort and foot protection of your players!

## INTRODUCING...

New color combinations in the Collegiate



Double heel cushion  
Eliminates bone  
bruises



Built up arch cushion  
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Full cushion insole  
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**BEACON FALLS RUBBER FOOTWEAR**  
BEACON FALLS, CONNECTICUT

### COACHES

Place your 1949 orders  
now with your Sport-  
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1930



1921

The growth of the IVORY SYSTEM—from its small factory beginning to its present size—with acres of land and thousands of feet of floor space—was brought about as the result of the confidence placed in the I.S. by thousands of Coaches and Athletic Directors throughout the land.

The IVORY SYSTEM—as the Oldest and Largest business of its kind—will continue to justify that confidence by doing the finest reconditioning work that can be done by anybody—anywhere.



Ivory System

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RECONDITIONERS  
OF ATHLETIC  
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